

ARKANSAS

LICENSED

PROFESSIONAL

ENGINEER

No.9678

LEGEND

 \triangle

HYDRODEMOLITION

& LATEX MODIFIED CONCRETE OVERLAY

BRIDGE DATA



HWY. 1, SEC. 4 LOG MILE 1.551 BR. END OVER PRICES BRANCH 90'-0" BRIDGE NO. 03384 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 79, SEC. 7 LOG MILE 7.771 BR. END OVER SALINE RIVER 2013'-2" BRIDGE NO. 03011 26'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 49, SEC. 2 LOG MILE 7.177 BR. END OVER LOCUST CREEK 75'-0" BRIDGE NO. 03085 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 26, SEC. 3 LOG MILE 11.726 BR. END OVER WOLF CREEK 152'-3" BRIDGE NO. 02735 24'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 115, SEC. 2 LOG MILE 16.045 BR. END OVER STRAWBERRY RIVER 700'-1" BRIDGE NO. 03253 24'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 49, SEC. 2 LOG MILE 6.177 BR. END OVER SLAVENS CREEK 75'-0" BRIDGE NO. 03086 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 367, SEC. 15 LOG MILE 8.028 BR. END OVER LAWRENCE BAYOU 50'-0" BRIDGE NO. 01446 27'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 49, SEC. 2 LOG MILE 9.207 BR. END OVER HENDERSON CREEK 75'-0" BRIDGE NO. 03083 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 367, SEC. 15 LOG MILE 5.455 BR. END OVER GUM BAYOU 181'-0" BRIDGE NO. 01462 24'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 49, SEC. 2 LOG MILE 8.699 BR. END OVER HURRICANE CREEK 75'-0" BRIDGE NO. 03084 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS		
		6	ARK.	012392	3	25		
		INDEX OF SHEETS AND STANDARD DRAWINGS						

INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE NO.	DRWG.NO.
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55060	_STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY SLAB ON BEAM/GIRDER BRIDGES	06-25-20
55061	_STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY SLAB ON BEAM/GIRDER BRIDGES WITH GRADE RAISE	06-25-20
55062	_STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY REINFORCED CONCRETE SLAB STRUCTURES	06-25-20
55063	_STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY VOIDED CONCRETE SLAB STRUCTURES	06-25-20
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ROADWAY STANDARD DRAWINGS

DRWG.N	NO. TITLE	DATE
PM-1	PAVEMENT MARKING DETAILS	02-27-20
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	05-20-21
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-12-21
TC-4	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TC-5	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19

	DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS		
			6	ARK.	012392	4	25		
ł			GOVERNING SPECIFICATIONS & GENERAL NOTES						

ARKAŅŠAS LICENSED PROFESSIONAL ENGINEER

GENERAL NOTES

- BRIDGE ANALYSIS SHALL BE REQUIRED PER SECTION 105.14 OF THE STANDARD SPECIFICATIONS. A BRIDGE ANALYSIS SHALL BE REQUIRED PRIOR TO HYDRODEMOLITION AND ANOTHER ANALYSIS SHALL BE REQUIRED DURING THE HYDRODEMOLITION PROCESS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U.S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL AND CONTAINED LIVESTOCK IF FENCING OF PASTURES IS SEVERED.
- ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED IF AND WHERE DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
- PREPARATORY WORK, SUCH AS CLIPPING THE GRASS AND DEBRIS FROM THE EDGE OF THE EXISTING ROADWAY. WILL NOT BE PAID FOR DIRECTLY. BUT WILL BE CONSIDERED A PART OF THE OTHER ITEMS OF WORK. AFTER THE ROADWAY IS COMPLETED, THIS MATERIAL SHALL BE PULLED UP TO THE EDGE OF THE NEW PAVEMENT AT LOCATIONS WHERE THE DROP OFF IS GREATER THAN 4" RESULTING FROM THE TRANSITIONS OR GUARDRAIL ROADWAY IMPROVEMENTS. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK.
- 7. ASPHALT DEBRIS RESULTING FROM THE PREPARAORY WORK SHALL BE REMOVED FROM THE PROJECT. THIS MATERIAL SHALL NOT BE BURIED OR STOCKPILED WITHIN THE RIGHT OF WAY.
- THE ENGINEER MAY REQUIRE THE CONTRACTOR TO MODIFY THEIR SCHEDULE, DURING WORK WHEN SPECIAL EVENTS OR OCCURRENCES MAY CAUSE TRAFFIC TO BECOME CONGESTED.
- THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 10. ROADWAY COLD MILLED TRANSITION SHALL BE OVERLAID WITHIN 7 CALENDAR DAYS. IF AN AREA OF THE PROJECT HAS BEEN COLD MILLED AND IS NOT OVERLAID ON OR BEFORE THE 7TH DAY, NO ADDITIONAL COLD MILLING SHALL TAKE PLACE UNTIL THE MILLED AREA IS OVERLAID.
- 11. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- 12. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE IF AND WHERE DIRECTED BY THE ENGINEER.
- 13. BRIDGE PRESERVATION PROJECTS AND PAVEMENT PRESERVATION PROJECTS ARE ONGOING SIMULTANEOUSLY IN ALL DISTRICTS IN ARKANSAS. THE CONTRACTOR SHALL COORDINATE THE BRIDGE PRESERVATION SCHEDULE WITH THE DISTRICT AND PRIORITIZE BRIDGE REHABILITATION IF AND WHERE DIRECTED BY THE ENGINEER IN ORDER FOR THE BRIDGE PRESERVATION TO BE COMPLETED BEFORE THE ASSOCIATED PAVEMENT PRESERVATION PROJECT BEGINS WORK. THERE SHALL BE NO DIRECT PAYMENT FOR FULFILLING THIS REQUIREMENT, BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

ERRATA _____ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS FHWA-1273_REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

FHWA-1273_SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS

FHWA-1273_SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)

FHWA-1273_SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES FHWA-1273_SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS

FHWA-1273_SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS

FHWA-1273_SUPPLEMENT - WAGE RATE DETERMINATION

CONTRACTOR'S LICENSE

_DEPARTMENT NAME CHANGE LISSUANCE OF PROPOSALS

_MAINTENANCE DURING CONSTRUCTION

RESTRAINING CONDITIONS

108-1 LIQUIDATED DAMAGES

108-2 _WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER

306-1 _QUALITY CONTROL AND ACCEPTANCE

400-1 _TACK COATS

_DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
_PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
_LIQUID ANTI-STRIP ADDITIVE 400-4

400-5

400-6

400-7 _TRACKLESS TACK

404-3 _DESIGN OF ASPHALT MIXTURES

CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES 410-1

DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS 410-2

EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL 410-4

501-2

NUMBER

LANE CLOSURE NOTIFICATION

RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES

_TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH) 604-3

_STRUCTURES

802-4 CEMENT

_REINFORCING STEEL FOR STRUCTURES 804-2

JOB 012392_ASSESSMENT OF WORKING DAYS – MAINTENANCE OF TRAFFIC JOB 012392 BIDDING REQUIREMENTS AND CONDITIONS

JOB 012392 BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS

JOB 012392_BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT

JOB 012392_CARGO PREFERENCE ACT REQUIREMENTS

JOB 012392 COLD MILLING - COUNTY PROPERTY

JOB 012392_CONCRETE BRIDGE DECK CURING AND SURFACE TREATMENT RESTRICTIONS

JOB 012392_CONCRETE REPAIRS

JOB 012392_COORDINATION OF WORK

JOB 012392_DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES JOB 012392_GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

JOB 012392_HYDRODEMOLITION - CLASS 2

JOB 012392_JOINT REHABILITATION FOR BRIDGE DECKS

JOB 012392 LATEX MODIFIED CONCRETE OVERLAY
JOB 012392 LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS

JOB 012392_LONGITUDINAL JOINT DENSITIES FOR ACHM SURFACE COURSES JOB 012392 MAINTENANCE OF TRAFFIC

JOB 012392_MANDATORY ELECTRONIC CONTRACT

JOB 012392_MANDATORY ELECTRONIC DOCUMENT SUBMITTAL

JOB 012392_NESTING SITES OF MIGRATORY BIRDS

JOB 012392_PARTNERING REQUIREMENTS

JOB 012392_PORTABLE TRAFFIC SIGNAL SYSTEM

JOB 012392_PRICE ADJUSTMENT FOR ASPHALT BINDER

JOB 012392_PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICE OR EQUIPMENT

JOB 012392_RAILING REPAIR

JOB 012392_SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS

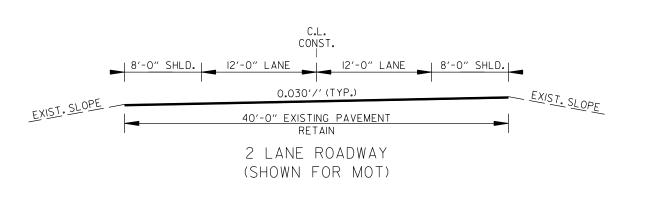
JOB 012392_TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES

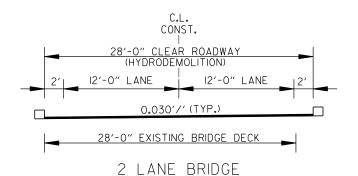
JOB 012392 VALUE ENGINEERING

JOB 012392 WARM MIX ASPHALT

JOB 012392_WATER POLLUTION CONTROL

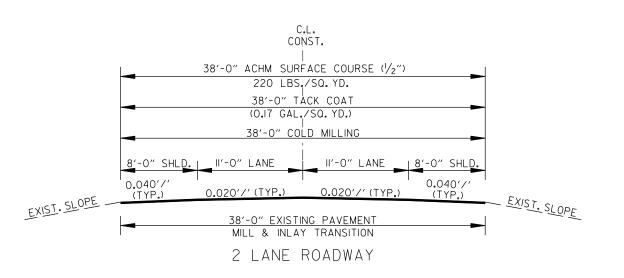


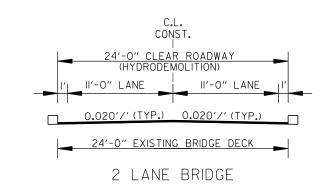




28 FT. CLEAR ROADWAY BRIDGE - HYDRODEMOLITION

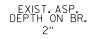
* APPROACH ROADWAY TRANSITIONS FROM THREE LANE TO TWO LANE BEFORE BEGINNING OF BRIDGE. ↑ BR. NO. 03384- HWY.I





24 FT. CLEAR ROADWAY BRIDGE - HYDRODEMOLITION (MILLING ASPHALT ON BR. DECK AND ROADWAY TRANSITIONS)

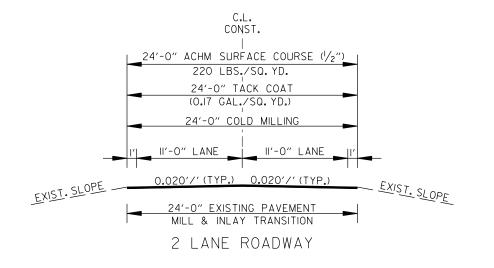
2 - BR. NO. 02735- HWY. 26

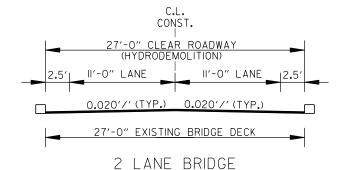


NOTES:

- STRINGLINE WILL BE USED TO MAINTAIN A UNIFORM HORIZONTAL ALIGNMENT.
- THE CONTRACTOR SHALL FURNISH & MAINTAIN STD. W8-II "UNEVEN LANES" SIGNS (48" X 48") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL LONGITUDINAL JOINTS DURING MILLING AND PAVING OPERATIONS.
- 3. LONGITUDINAL JOINTS ARE TO BE PLACED PER TYPICAL SECTION IN ACCORDANCE WITH SECTION 410.07 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 4. ALL CROSS SLOPES ARE TO MATCH EXISTING CROSS SLOPES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5. REFER TO SPECIAL DETAILS AND QUANTITY BOXES FOR ROADWAY TRANSITION INFORMATION.



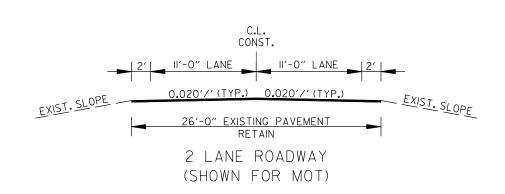


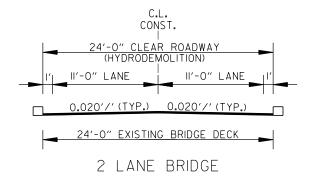


27 FT. CLEAR ROADWAY BRIDGE - HYDRODEMOLITION (MILLING ASPHALT ON BR. DECK AND ROADWAY TRANSITIONS)

EXIST. ASP.
DEPTH ON BR.

3 - BR. NO. 01446- HWY. 367 2"





24 FT. CLEAR ROADWAY BRIDGE - HYDRODEMOLITION

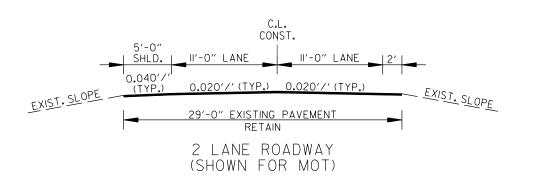
4 - BR. NO. 01462- HWY. 367

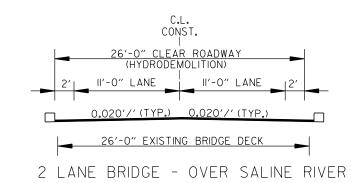
NOTES:

- STRINGLINE WILL BE USED TO MAINTAIN A UNIFORM HORIZONTAL ALIGNMENT.
- THE CONTRACTOR SHALL FURNISH & MAINTAIN STD. W8-II "UNEVEN LANES" SIGNS (48" X 48") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL LONGITUDINAL JOINTS DURING MILLING AND PAVING OPERATIONS.
- 3. LONGITUDINAL JOINTS ARE TO BE PLACED PER TYPICAL SECTION IN ACCORDANCE WITH SECTION 410.07 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 4. ALL CROSS SLOPES ARE TO MATCH EXISTING CROSS SLOPES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5. REFER TO SPECIAL DETAILS AND QUANTITY BOXES FOR ROADWAY TRANSITION INFORMATION.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS	
		6	ARK.	012392	7	25	
		TYPICAL SECTIONS OF IMPROVEMENT					





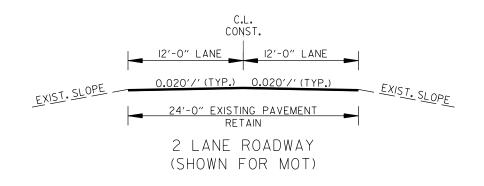


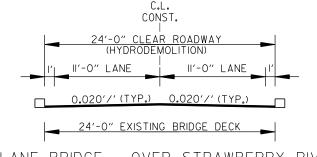
26 FT. CLEAR ROADWAY BRIDGE - HYDRODEMOLITION

5 - BR. NO. 030II- HWY. 79

NOTE:

ALL CROSS SLOPES ARE TO MATCH EXISTING CROSS SLOPES UNLESS OTHERWISE APPROVED BY THE ENGINEER.





2 LANE BRIDGE - OVER STRAWBERRY RIVER

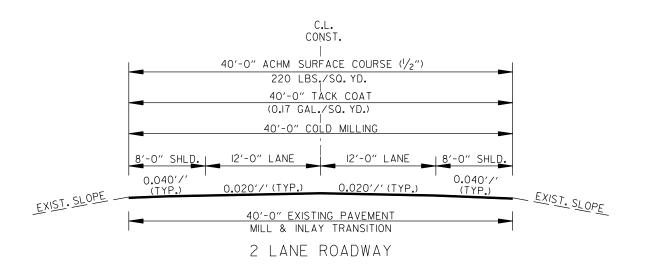
24 FT. CLEAR ROADWAY BRIDGE - HYDRODEMOLITION (ROADWAY TRANSITION ON EAST END)

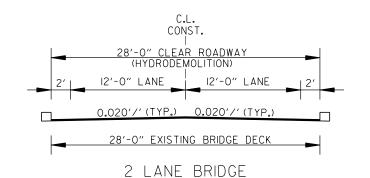
6 - BR. NO. 03253- HWY. II5

* BRIDGE HAS ASPHALT OVERLAY ONLY AT END SPAN. REFER TO COLD MILLING QUANTITY SHEET FOR LENGTH NEEDED TO BE COLD MILLED.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS	
		6	ARK.	012392	8	25	
		TYPICAL SECTIONS OF IMPROVEMENT					







28 FT. CLEAR ROADWAY BRIDGES - HYDRODEMOLITION (MILLING ASPHALT ON BR. DECK AND ROADWAY TRANSITIONS)

BEXIST. ASP. DEPTH ON BR.

	DĒPTH OI
→ PR. NO. 03083- HWY. 49	2"
8 - BR. NO. 03084- HWY. 49	2"
9 - BR. NO. 03085- HWY. 49	2"
6 - BR. NO. 03086- HWY. 49	2"

NOTES:

- I. STRINGLINE WILL BE USED TO MAINTAIN A UNIFORM HORIZONTAL ALIGNMENT.
- THE CONTRACTOR SHALL FURNISH & MAINTAIN STD. W8-II"UNEVEN LANES" SIGNS (48" X 48") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL LONGITUDINAL JOINTS DURING MILLING AND PAVING OPERATIONS.
- 3. LONGITUDINAL JOINTS ARE TO BE PLACED PER TYPICAL SECTION IN ACCORDANCE WITH SECTION 410.07 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 4. ALL CROSS SLOPES ARE TO MATCH EXISTING CROSS SLOPES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5. REFER TO SPECIAL DETAILS AND QUANTITY BOXES FOR ROADWAY TRANSITION INFORMATION.

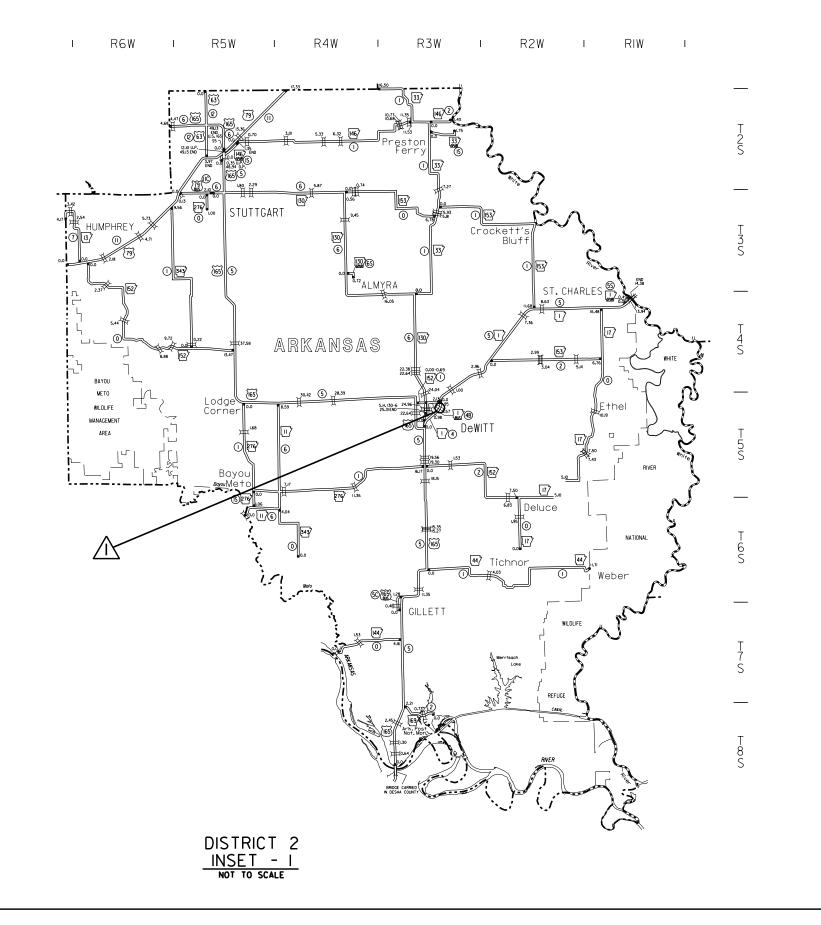
DISTRICT DISTRICT TELL DISTRIC 8

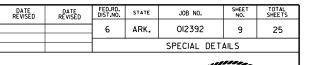
ARKANSAS HIGHWAY DISTRICT 2

LEGEND

- HYDRODEMOLITION & LATEX MODIFIED CONCRETE OVERLAY

HWY. 1, SEC. 4 LOG MILE 1.551 BR. END OVER PRICES BRANCH 90'-0" BRIDGE NO. 03384 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)





ARKANŠAS LIČENŠED PROFESSIONAL ENGINEER

PATE REVISED PATE REVISED FED. STATE JOB NO. SHEET SHEETS

6 ARK. 012392 10 25

SPECIAL DETAILS

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4-26-22



R27W

R26W

R25W

R24W

R23W

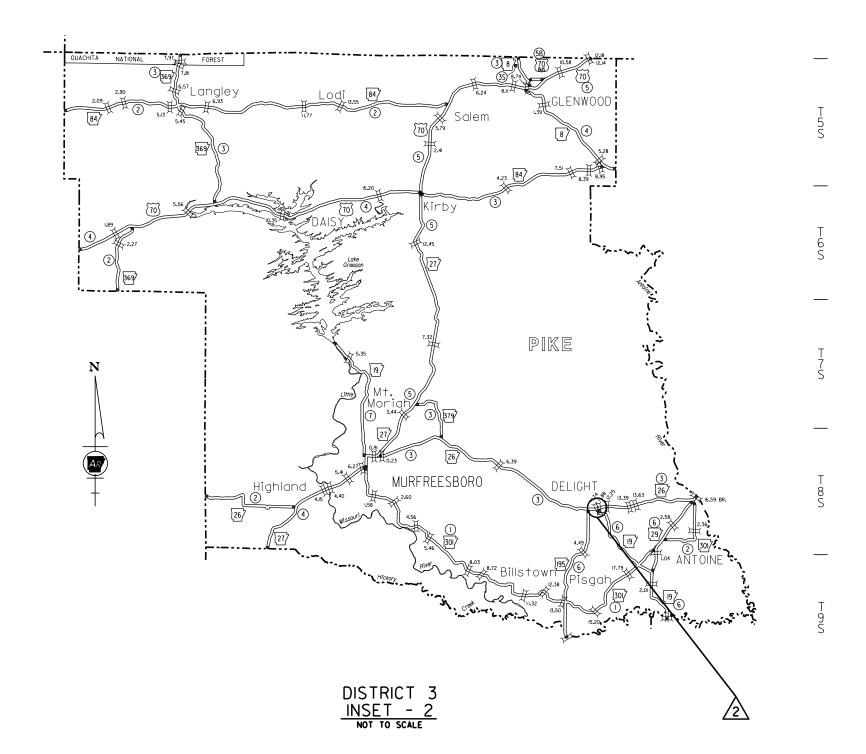
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LEGEND

- HYDRODEMOLITION & LATEX MODIFIED CONCRETE OVERLAY

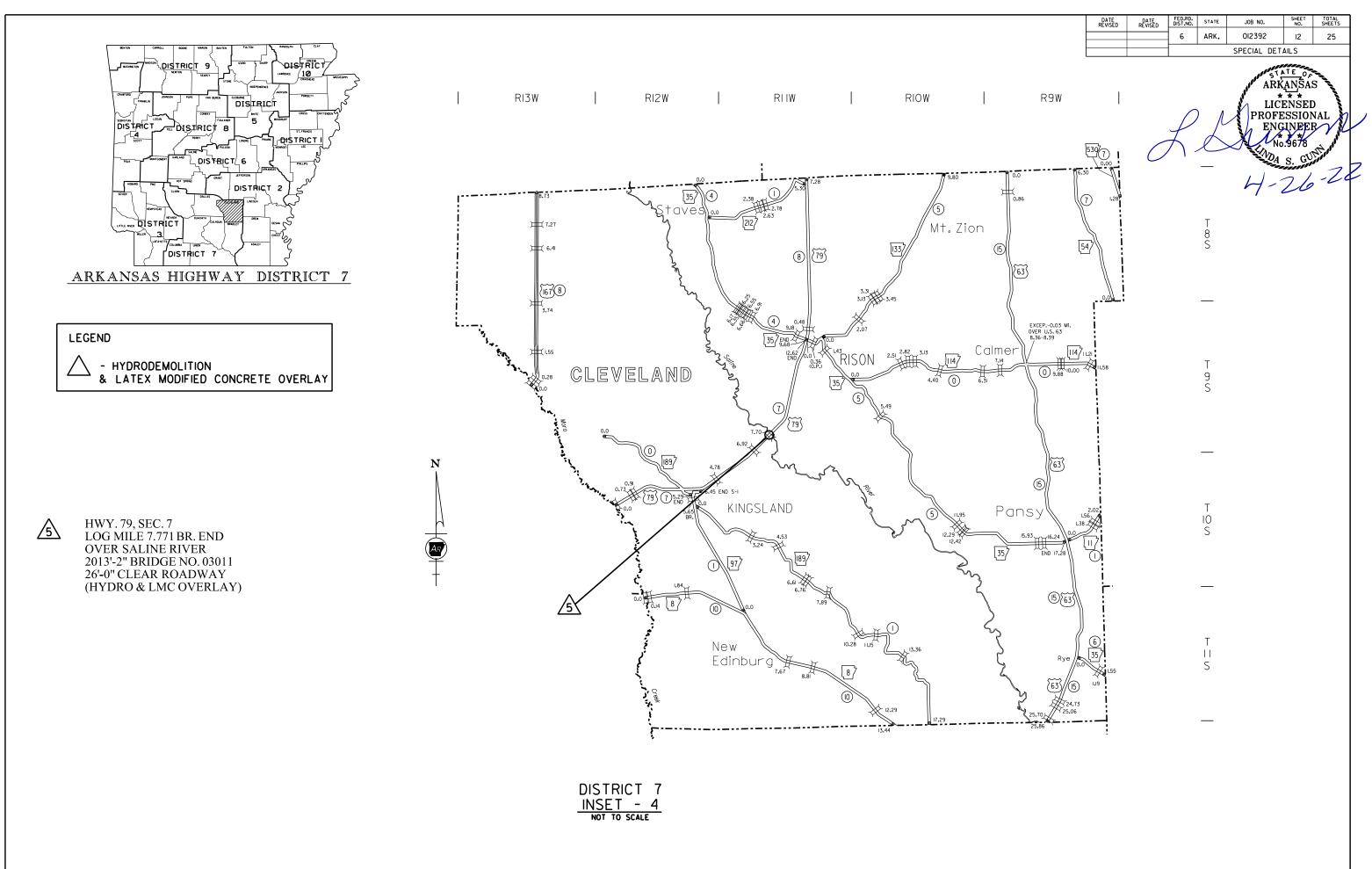
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HWY. 26, SEC. 3 LOG MILE 11.726 BR. END OVER WOLF CREEK 152'-3" BRIDGE NO. 02735 24'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



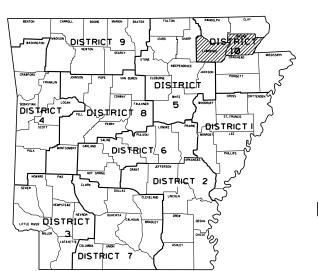
Cifford.Wed WORKSPACE: ARDOT Y:Nrojects.ARDO1,187919_0102392_Hydrodemolition Bridge Preservation\Design\CiviL - Bridge Only\Drawings\R

SPECIAL DETAILS



UITAGAÜNBIG WORKSAKE: ARDOT TYAP-Geets-ARDOT (1879) 012392.Hydrodemolition Bridge Preservation\Design\CIVIL - Bridge Only\Drawings\ROI2?

SPECIAL DETAILS



ARKANSAS HIGHWAY DISTRICT 10

LEGEND

- HYDRODEMOLITION & LATEX MODIFIED CONCRETE OVERLAY

HWY. 115, SEC. 2 LOG MILE 16.045 BR. END OVER STRAWBERRY RIVER 700'-1" BRIDGE NO. 03253 24'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 49, SEC. 2 LOG MILE 9.207 BR. END OVER HENDERSON CREEK 75'-0" BRIDGE NO. 03083 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



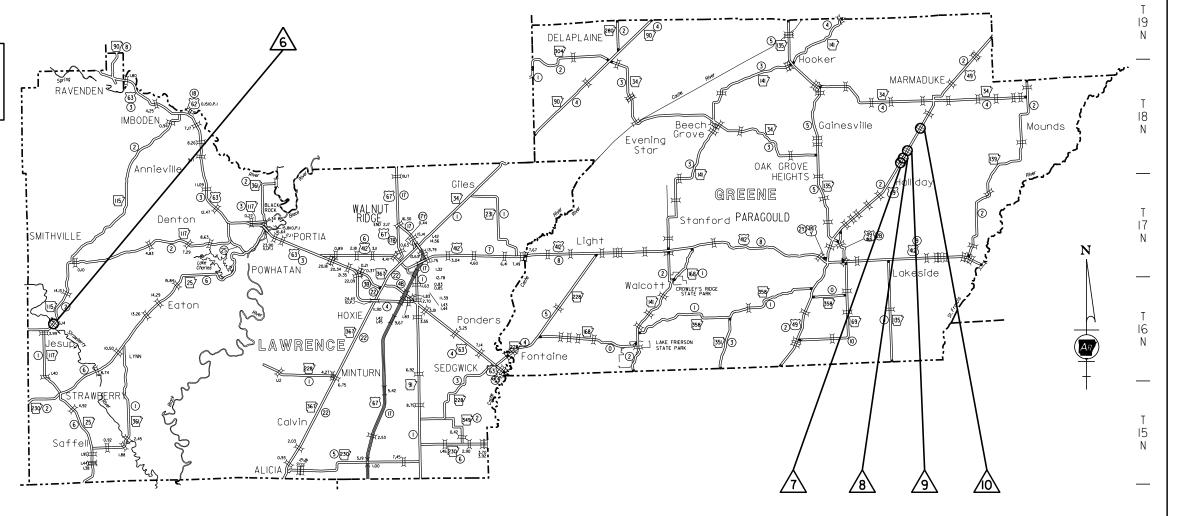
HWY. 49, SEC. 2 LOG MILE 8.699 BR. END OVER HURRICANE CREEK 75'-0" BRIDGE NO. 03084 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 49, SEC. 2 LOG MILE 7.177 BR. END OVER LOCUST CREEK 75'-0" BRIDGE NO. 03085 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



HWY. 49, SEC. 2 LOG MILE 6.177 BR. END OVER SLAVENS CREEK 75'-0" BRIDGE NO. 03086 28'-0" CLEAR ROADWAY (HYDRO & LMC OVERLAY)



R3E

R4E

R5E

R6E

DISTRICT IO INSET - 5 NOT TO SCALE

RIE

R2E

SPECIAL DETAILS

STATE

ARK.

JOB NO.

012392

SPECIAL DETAILS

13

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ENGINEER No. 3678

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS	
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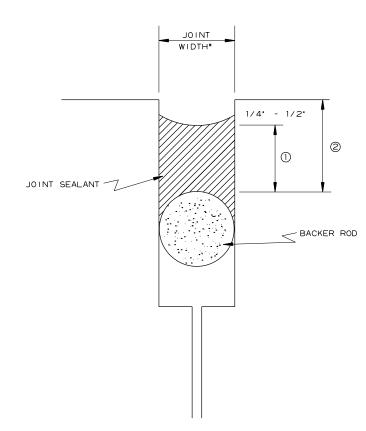
ARKANŠAS
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PROFESSIONAL
ENGINEER
No.9678

H-210-22

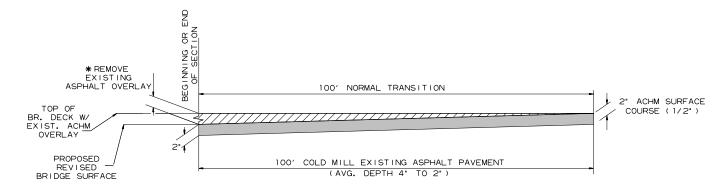
JOINT CONFIGURATION FOR TYPE 3 & 4 JOINT SEALANT

TMIOL HTDIW	SEALANT THICKNESS	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH
	IN	ICHES	
1/4	1/4	3/8	1/2
3/8	1/4	1/2	1/2
1/2	1/4	5/8	1/2
5/8	5/16	3/4	9/16
3/4	3/8	7/8	7/8
4/8	7/16	1	11/16
1	1/2	1 1/4	3/4
1 TO 1 1/2	1/2	1 1/4+	3/4

NOTE: JOINTS GREATER THAN 1 1/2' IN WIDTH SHALL BE SEALED WITH TYPE 5 JOINT SEALANT.



* CONTRACTION JOINTS SHALL BE SAWED TO MIN. WIDTH OF 3/8*. WARPING & LONGITUDINAL JOINTS SHALL BE SAWED TO MIN. WIDTH OF EXISTING WIDTH +1/8* (1/16* ON EACH SIDE).



* REFER TO TYPICAL SECTIONS FOR EXISTING ASPHALT DEPTH ON BRIDGE DECKS.

DETAIL FOR TRANSITIONS

TRANSITION NOTES:

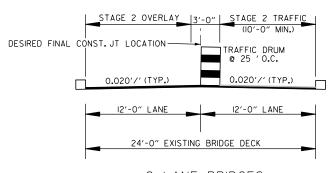
I. ACHM SHALL BE PLACED FOR ROADWAY TRANSITIONS AFTER HYDRODEMOLITION HAS BEEN COMPLETED.

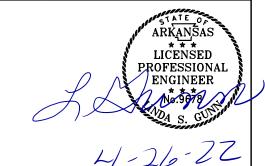
2. DIMENSIONS AND QUANTITIES WILL BE FIELD VERIFIED BY THE ENGINEER AND ARE SHOWN FOR ESTIMATING AND BIDDING PURPOSES ONLY.
QUANTITIES WILL BE PAID BY ACTUAL MEASUREMENTS TAKEN IN THE FIELD.

DETAILS OF TYPE A OR TYPE B
JOINT REHABILITATION

DATE REVISED DATE REVISED STATE TOTAL SHEETS JOB NO. MAINTENANCE OF TRAFFIC NOTES: MAINTENANCE OF TRAFFIC NOTES (CONT.): ARK. 012392 15 I. THE CONTRACTOR SHALL PROVIDE 2-WAY RADIO COMMUNICATION FOR FLAG PERSON FOR CONSTRUCTION UNDER TRAFFIC. 5. FLAGGING MAY BE USED IF AND WHERE DIRECTED MAINTENANCE OF TRAFFIC DETAILS BY THE ENGINEER. 2. THE CONTRACTOR SHALL FURNISH AND MAINTAIN STD. W8-I "BUMP" SIGNS (30" X 30") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL TRANSVERSE JOINTS EXPOSED TO TRAFFIC. **ARKAŅŠAS** 3. THE CONTRACTOR SHALL FURNISH AND MAINTAIN STD. W8-II "UNEVEN LANES" SIGNS (48" X 48") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL LICENSED LONGITUDINAL JOINTS DURING MILLING AND PAVING OPERATIONS. PROPESSIONAL ENGINEER 4. THE EDGE LINES SHALL NOT BE PLACED ON THE FINISHED ASPHALT SURFACE UNTIL AFTER ALL WORK ADJACENT TO THE PAVEMENT EDGE, INCLUDING SPREADING, No.9678 COMPACTING AND ETC. IS COMPLETED IN ORDER TO AVOID DAMAGING THE EDGE LINES. (1) LANE CLOSURE BRIDGE LENGTH + ROADWAY THROUGH END OF TRANSITIONS 140' 250' 250′ 250' 250' 250' 250 500' 500' 50′ 80' TAPER TRAFFIC DRUMS @ 40' O.C. IN CLOSED LANE 12" WHITE STOP LINE PORTABLE TRAFFIC SIGNAL SYSTEM CONSTRUCTION SEQUENCE * TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER. FLAGGING WILL BE UTILIZED ON SHORTER BRIDGES THAT CAN BE ַלט |ഗ]ೆ ∣℧∄ STC INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE LOCATIONS SHOWN (30" (30" OPEN AT NIGHT FOR NORMAL FOR STAGE I. TRAFFIC. (30" R2-1 × 36" × ম INSTALL MAINTENANCE OF TRAFFIC DEVICES AS SHOWN IN STAGE LAND REMOVABLE انکا 10-6 36") CONSTRUCTION PAVEMENT MARKINGS (12" WH. STOP LINES). ON CLOSED LANE & SHOULDER - RT. (BRIDGE AND ROADWAY): CONSTRUCT BRIDGE RIGHT HYDRODEMOLITION. (36" SHOULDER * (2) W2I-5a w3-5 × 36") CLOSED (36" X 36") STAGE 2: MIRROR INSTALLATION OF ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS FOR STAGE 2. MIRROR INSTALLATION MAINTENANCE OF TRAFFIC DEVICES FOR STAGE 2 AND INSTALL REMOVABLE CONSTRUCTION PAVEMENT MARKINGS (12" WH. STOP LINES). SHIFT TRAFFIC ONTO OPPOSITE LANE FOR STAGE 2. NOT * (2) R4-I (24" X 30") PASS ON CLOSED LANE & SHOULDER - LT. (BRIDGE AND ROADWAY): CONSTRUCT BRIDGE HYDRODEMOLITION. 36,0 REMOVE MAINTENANCE OF TRAFFIC DEVICES & REMOVABLE CONSTRUCTION PAVEMENT MARKINGS. TO BE USED IF AND WHERE INSTALL PERMANENT PAVEMENT MARKINGS. DIRECTED BY THE ENGINEER R2-1 × 36" R2-1 × 36" R2-1 × 36″ (1) (1) RETURN TRAFFIC TO NORMAL PATTERN ON ROADWAY. (1) (30″ (30″ (30″ SPEED LIMIT 35 äĘΩ TAPER **∮**4 宁 PORTABLE TRAFFIC SIGNAL SYSTEM BRIDGE BRIDGE LOG TRAFFIC BR. DECK CLEAR ROUTE SEC. DRUMS ROADWAY WIDTH MILE 12" WHITE STOP LINE DIST. 2 BR. 03384 28' - 0" HWY.I 1.551 24' - 0" BR. 02735 19 HWY. 26 11.726 DIST.5 BR. 01446 27' - 0" HWY. 367 15 8.028 BR. 01462 HWY. 367 5.455 20 24' - 0" 500' 500 250' 250 250 250 250' 2501 DIST. 7 BR. 030II 65 26' - 0" HWY. 79 7.771 I. VERTICAL PANEL QUANTITIES ARE PROVIDED FOR BRIDGE CLEAR ROADWAY WIDTH OF 28'-0" G20-2 DIST. 10 BR. 03253 HWY. II5 2 16.045 33 24' - 0" OR LESS TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.
2. A QUANTITY OF FURNISHING AND INSTALLING BR. 03083 28' - 0" 9.207 PRECAST CONC. BARRIER AND RELOCATION BR. 03084 17 28' - 0" HAS BEEN PROVIDED FOR THE BACKWALL REPAIR ON BR. 6 - 03253. LEGEND BR. 03085 17 28' - 0" 3. SPECIAL END UNITS ARE TO BE INCLUDED IN HWY. 49 7.177 THE BID PRICE FOR FURN. & INSTALLING PRECAST CONCRETE BARRIER. BR. 03086 HWY. 49 17 28' - 0" TRAFFIC DRUM 6.177 2 4. REFER TO STANDARD DRAWINGS TC-4 AND TC-5 FOR BARRIER WALL PLACEMENT. TEMPORARY TRAFFIC SIGN LANE CLOSURE WITH PORTABLE TRAFFIC SIGNAL SYSTEM TRAFFIC FLOW ARROWS & TRAFFIC DRUMS FOR HYDRODEMOLITION BRIDGES ADVANCE WARNING (2 LANE ROADWAY) (VAR. CLEAR ROADWAY ON THE BRIDGE DECKS) MAINTENANCE OF TRAFFIC DETAILS

Clifford.Weld 4/26/2022 WORKSPACE: ARDOT Y:\Projects\ARDOT_\8799_012 REVISED DATE: \$\$REVDATE\$\$



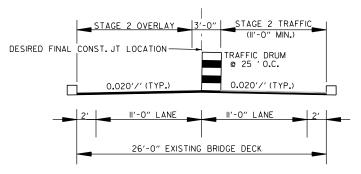


TYPICAL SECTIONS
(2 LANE ROADWAYS)

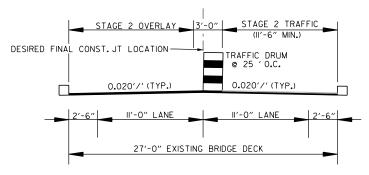
OF TRAFFIC DETAILS

MAINTENANCE

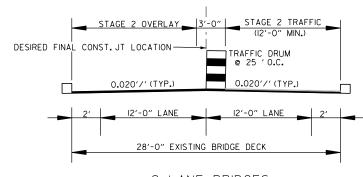
2 LANE BRIDGES



2 LANE BRIDGES



2 LANE BRIDGES



2 LANE BRIDGES



28'-0" EXISTING BRIDGE DECK

2 LANE BRIDGES

STAGE | TRAFFIC 3'-0" STAGE | OVERLAY

24'-0" EXISTING BRIDGE DECK

2 LANE BRIDGES

- DESIRED FINAL CONST. JT LOCATION

- DESIRED FINAL CONST. JT LOCATION

0.020'/'(TYP.)

II'-O" LANE

STAGE IOVERLAY

II'-O" LANE

(IO'-O" MIN.)

I' II'-O" LANE

TRAFFIC DRUM @ 25 'O.C.

0.020'/' (TYP.)

STAGE I TRAFFIC 3'-0"

TRAFFIC DRUM
© 25 'O.C.

II'-O" LANE

26'-0" EXISTING BRIDGE DECK

2 LANE BRIDGES

(II'-0" MIN.)

0.020'/'(TYP.)

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012392	17	25
		PERMANENT PAVEMENT MARKING DETAIL				

ARKANSAS

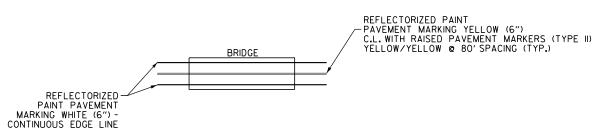
LICENSED

PROFESSIONAL

ENGINEER

No.9678

4-210-22



BRIDGES < 2,000 ADT

	BRIDGE ID	BRIDGE #	ROUTE	SECTION	LOG MILE
DIST. 3	2	BR. 02735	H W Y. 26	3	II . 726
DIST. 5	3	BR. 01446	HWY. 367	15	8.028
DIST. 10	<u></u>	BR. 03253	H W Y. 115	2	16.045

PERMANENT PAVEMENT MARKING DETAILS TWO LANE ROADWAYS W/ BRIDGE

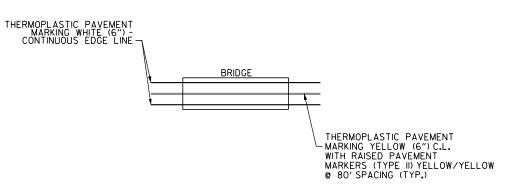
NOTES.

I. BRIDGE AND ROADWAY DIMENSIONS VARY FOR EACH SITE. REFER TO TYPICAL SECTIONS.

2. PAVEMENT MARKINGS ARE TO BE PLACED FROM BEGINNING OF TRANSITION LEADING INTO EACH SITE THROUGH ENDING TRANSITION, REFER TO "COLD MILLING ASPHALT PAVEMENT" QUANTITY BOX FOR TRANSITION LENGTHS AT EACH BRIDGE SITE.

3. REFER TO "PERMANENT PAVEMENT MARKINGS" QUANTITY BOX FOR STRIPING AND RAISED PAVEMENT MARKER QUANTITIES AT EACH BRIDGE SITE.

NOTE: THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMET OF THE FINAL STRIPING. CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.



BRIDGES > 2,000 ADT

	BRIDGE ID	BRIDGE #	ROUTE	SECTION	LOG MILE
DIST. 2	\triangle	BR. 03384	HWY.I	4	I . 55I
DIST. 5	4	BR. 01462	HWY. 367	15	5.455
DIST. 7	<u> </u>	BR. 030II	H W Y.79	7	7.771
DIST. 10	\triangle	BR. 03083	HWY. 49	2	9.207
	8	BR. 03084	HWY. 49	2	8.699
	<u>\$</u>	BR. 03085	HWY. 49	2	7.177
	10	BR. 03086	H W Y.49	2	6.177

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012392	18	25
				QUANTITIES		

LICENSED PROPESSIONAL ENGINEER No.9678

ADVANCE WARNING SIGNS AND DEVICES - DISTRICTS 2, 3, 5, 7, & 10 LANE CLOSURE FOR HYDRODEMOLITION BRIDGES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		VERTICAL TRAFFIC DRUMS			PRECAST CONC. BARRIER	PORTABLE TRAFFIC SIGNAL SYSTEM-ACTUATED	
ADVANCE	I Varning Signs - Highway		LIN, FI,	- EACH		NO.	SQ.FT.	EAC	,п	LIN.	F1.	WEEK	WEEK
	ROAD WORK 1500 FT.	36"x36"	1	1 4	1	1	36.0	l	ı	1			
	ONE LANE ROAD 1/2 MILE	36"x36"	4	4	4	4	36.0						
	ONE LANE ROAD 1000 FT.	36"x36"	4	4	4	4	36.0						
	END ROAD WORK	36"x18"	4	4	4	4	18.0						
	ADVANCED TRAFFIC CONTROL - TRAFFIC SIGNAL	30"x30"	4	4	4	4	25.0						
	BE PREPARED TO STOP	36"x36"	4	4	4	4	36.0						
	REDUCED SPEED LIMIT SIGN AHEAD	36"x36"	4	4	4	4	36.0						
	SPEED LIMIT	30"x36"	12	12	12	12	90.0						
R10-6	STOP HERE ON RED	24"x36"	4	4	4	4	24.0						
R4-1	DO NOT PASS	24"x30"	4	4	4	4	20.0						
W21-5a	RIGHT SHOULDER CLOSED	36"x36"	4	4	4	4	36.0						
W8-1	BUMP	30"x30"	4	4	4	4	25.0						
W8-11	UNEVEN LANES	48"x48"	4	4	4	4	64.0						•
SUBTOTALS	S (DISTRICTS 2, 3, 5, 7, & 10 - ADVANCE WARNING SIGNS - HIGHWA	(Y):	·	·			482.0	, and the second	·				

G											
ADVANCE DEVICES											
VERTICAL PANELS	111	111	111			111					
TRAFFIC DRUMS	111	111	111				111				
FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER	760		760					760			
RELOCATING PRECAST CONCRETE BARRIER		760	760						760		
PORTABLE TRAFFIC SIGNAL SYSTEM-ACTUATED			90							90	
PORTABLE CHANGEABLE MESSAGE SIGN			65								65
SUBTOTALS (DISTRICT 2, 3, 5, 7, & 10 - ADVANCE DEVICES): 111 111 760 760 90 65										65	
PROJECT TOTALS (DISTRICTS 2, 3, 5, 7, & 10);					482.0	111	111	760	760	90	65

NOTES: MAINTENANCE OF TRAFFIC ITEMS ARE TO BE RELOCATED BETWEEN BRIDGE SITES AND DISTRICTS IF AND WHERE DIRECTED BY THE ENGINEER, THE TOTALS REPRESENT AN ESTIMATED QUANTITY AND TIME USAGE.

THERE ARE BOTH HIGH AND LOW TRAFFIC VOLUME LOCATIONS IN DISTRICTS 2, 3, 5, 7, & 10 AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. REFER TO PERMANENT PAVEMENT MARKING DETAILS FOR LIST OF HIGH AND LOW TRAFFIC VOLUMES IN EACH DISTRICT.

FURNISHING AND INSTALLING PRECAST BARRIER WALL AND RELOCATION QUANTITIES ARE PROVIDED TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER FOR BACKWALL REPAIR ON BR. # 6 - 03253.

THE PORTABLE TRAFFIC SIGNAL QUANTITY IS BASED ON THE TIME FOR EACH OF THE TWO SIGNALS AT A BRIDGE SITE. IF SEVERAL BRIDGE SITES ARE BEING WORKED CONCURRENTLY, THE "WEEK" QUANTITY IS BASED ON A SUM OF EACH SIGNAL USED.

QUANTITIES ESTIMATED. SEE SECTION 104.03 OF THE STD SPECS.

ARKAŅĪAS LACENSED RROFESSIONAL ENGINEER

COLD MILLING ASPHALT PAVEMENT - DIST. 3 (BOX 1 OF 3)

BR. ID # (TITLE SHEET)	BRIDGE STRUCTURE NO.	ROUTE	LOG MILE	LOCATION	* AVG. DEPTH OF ASPHALT	LENGTH	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
					INCHES	FEET	FEET	SQ. YD.
2	02735	26	11.726	BR. DECK	2	152.25	24	406.00
4	02/35	20	11.726	TRANSITION	2	200.00	22	488.89
SUBTOTAL (DIST. 3):							894.89
				D OLIGIAN EOD MEODMATION ON V. IETHE E				

*AVERAGE DEPTH OF ASPHALT IS ESTIMATED AND SHOWN FOR INFORMATION ONLY. IF THE FIELD DEPTH OF ASPHALT ON THE DECK IS DETERMINED TO BE THICKER THAN THE DEPTH SHOWN, NO ADDITIONAL PAYMENT WILL BE MADE FOR GREATER DEPTHS.

COLD MILLING ASPHALT PAVEMENT - DIST 5 (BOX 2 OF 3)

BR. ID # (TITLE SHEET)	BRIDGE STRUCTURE NO.	ROUTE	LOG MILE	LOCATION	* AVG. DEPTH OF ASPHALT	LENGTH	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
					INCHES	FEET	FEET	SQ YD
2	01446	367	0.020	BR. DECK	2	50.00	27	150.00
3 01446		367	8.028	TRANSITION	2	200.00	22	488.89
SUBTOTAL (DIST. 5):							638.89

*AVERAGE DEPTH OF ASPHALT IS ESTIMATED AND SHOWN FOR INFORMATION ONLY. IF THE FIELD DEPTH OF ASPHALT ON THE DECK IS DETERMINED TO BE THICKER THAN THE DEPTH SHOWN, NO ADDITIONAL PAYMENT WILL BE MADE FOR GREATER DEPTHS.

COLD MILLING ASPHALT PAVEMENT - DIST. 10 (BOX 3 OF 3)

BR. ID # (TITLE SHEET)	BRIDGE STRUCTURE NO.	ROUTE	LOG MILE	LOCATION	* AVG. DEPTH OF ASPHALT	LENGTH	AVG. WIDTH	PAVEMENT		
					INCHES	FEET	FEET	SQ. YD.		
6	03253	115	16.045	BR. DECK	2	50.00	24	133.33		
Ü	03233	115	10.045	TRANSITION	2	100.00	22	244.44		
7	03083	49	9.207	BR. DECK	2	75.00	28	233.33		
,	03063	49	9.207	TRANSITION	2	200.00	24	533.33		
8	03084	49	8.699	BR. DECK	2	75.00	28	233.33		
0	03064	49	0.099	TRANSITION	2	200.00	24	533.33		
9	03085	49	7.177	BR. DECK	2	75.00	28	233.33		
9	03085	49	7.177	TRANSITION	2	200.00	24	533.33		
10	03086	49	6 177	BR. DECK	2	75.00	28	233.33		
10	10 03086 49		6.177	TRANSITION	2	200.00	24	533.33		
SUBTOTAL (DIST. 10):										

*AVERAGE DEPTH OF ASPHALT IS ESTIMATED AND SHOWN FOR INFORMATION ONLY. IF THE FIELD DEPTH OF ASPHALT ON THE DECK IS DETERMINED TO BE THICKER THAN THE DEPTH SHOWN, NO ADDITIONAL PAYMENT WILL BE MADE FOR GREATER DEPTHS.

BR. NO. 6 - 03253 HAS ASPHALT OVERLAY ON THE EASTERN SIDE OF BRIDGE DECK. QUANTITY IF AND WHERE DIRECTED BY THE ENGINEER.

SUBTOTALS DIST. 3 - (BOX 10F 3):	894.89
SUBTOTALS DIST. 5 - (BOX 2 OF 3):	638.89
SUBTOTALS DIST. 10 - (BOX 3 OF 3):	3444.41
PROJECT TOTALS:	4978.19

*AVERAGE DEPTH OF ASPHALT IS ESTIMATED AND SHOWN FOR INFORMATION ONLY. IF THE FIELD DEPTH OF ASPHALT ON THE DECK IS DETERMINED TO BE THICKER THAN THE DEPTH SHOWN, NO ADDITIONAL PAYMENT WILL BE MADE FOR GREATER DEPTHS.

BASE AND SURFACING - MAIN LANE TRANSITIONS - DIST. 3 (BOX 1 OF 3)

				NOL AND CONTACTION	7111 E711E 1	I CANOLITICA	O DIOI.	O (DOX 101	٠,			
BR. ID#	BR.						TACK COA	т	AC	HM SURFA	CE COURSE (1/2	2")
(TITLE	(TITLE STRUCTURE ROUTE		LOG MILE	LOCATION	LENGTH	(0.17 GAL. PER SQ. YE		R SQ. YD.) TOTAL			DOLLNID /	TOTAL
SHEET)	NO.					TOTAL WID.	SQ.YD.	GALLONS	TOTAL WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22
,					FEET	FEET	SQ.YD.	GALLONS	FEET		30,10.	TON
2	02735	26	11.726	MAIN LANE TRANSITION	200.00	22	977.78	166.22	22	977.78	220	107.56
SUBTOTALS	(DIST. 3):							166.22				107.56

BASIS OF ESTIMATE (DIST. 3) ACHM SURFACE COURSE (1/2")....94.8% MIN. AGGR.......5.2% ASPHALT BINDER

MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22 TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

BASE AND SURFACING - MAIN LANE TRANSITIONS - DIST. 5 (BOX 2 OF 3)

				ACE AND CONTACING IN	All I EXITE	I CANOLITION	<u> </u>	O (DOX 2 OI	٠,			
BR. ID#	BR.						TACK COA	т	AC	HM SURFA	CE COURSE (1/	2")
(TITLE	STRUCTURE	ROUTE	LOG MILE	LOCATION			TOTAL	TOTAL WID.		DOLLNID /	TOTAL	
SHEET)	NO.					TOTAL WID.	SQ.YD.	GALLONS		SQ YD.	POUND / SQ.YD.	PG 64-22
,				FEET	FEET	3Q.1D.	GALLONS	FEET		30.10.	TON	
3	01446	367	8.028	MAIN LANE TRANSITION	200.00	22	977.78	166.22	22	977.78	220	107.56
SUBTOTALS	6 (DIST. 5):							166.22				107.56
BASIS OF ES	STIMATE (DIST. 5)					•				•	

...94.7% MIN. AGGR...... ACHM SURFACE COURSE (1/2")...

.....5.3% ASPHALT BINDER MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22 TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

BASE AND SURFACING - MAIN LANE TRANSITIONS - DIST. 10 (BOX 3 OF 3)

			υ,	OL AND GOIN AGING INF	(III E/\III II	CANOLITICAL	, DIO1. 1	0 (50% 00)	Ψ,			
BR. ID#	BR.						TACK COA	Т	ACHM SURFACE COURSE (1/2")			
(TITLE	STRUCTURE	ROUTE	LOG MILE	LOCATION	LENGTH	(0.17 GAL. PE	R SQ. YD.)	T0T41	TOTAL MID		DOLLING (TOTAL
SHEET)	NO.					TOTAL WID. SQ.	SO VD	TOTAL GALLONS	TOTAL WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22
· ·					FEET	FEET	SQ.YD.	GALLONS	FEET		SQ.TD.	TON
6	03253	115	16.045	MAIN LANE TRANSITION	100.00	22	244.44	41.55	22	244.44	220	26.89
7	03083	49	9.207	MAIN LANE TRANSITION	200.00	24	1066.67	181.33	24	1066.67	220	117.33
8	03084	49	8.699	MAIN LANE TRANSITION	200.00	24	1066.67	181.33	24	1066.67	220	117.33
9	03085	49	7.177	MAIN LANE TRANSITION	200.00	24	1231.68	209.39	24	1231.68	220	135.48
10	03086	49	6.177	MAIN LANE TRANSITION	200.00	24	1066.67	181.33	24	1066.67	220	117.33
SUBTOTALS	(DIST. 10):			·	•			794.93				514.36
DACIO OF FO	TIMATE (DICT 4	0)					-			-		

ACHM SURFACE COURSE (1/2"). ...94.9% MIN. AGGR.....

.....5.1% ASPHALT BINDER MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22 TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1FOR THE RESIDUAL ASPHALT APPLICATION RATES.

SUBTOTALS DIST. 3 - (BOX 10F 3):	166.22		107.56
SUBTOTALS DIST. 5 - (BOX 2 OF 3):	166.22		107.56
SUBTOTALS DIST. 10 - (BOX 3 OF 3):	794.93		514.36
PROJECT TOTALS:	1127.37		729.48

ARKANŠAS LIEENŠEO

PROFESSIONAL ENGINEER

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS - DIST. 2 (BOX 1 OF 5)

BR.ID# (TITLE	BR. STRUCTURE	ROUTE	LOG MILE	DESCRIPTION	REMOVABLE CONST. PAVEMENT	RAISED PAVEMENT MARKERS	THERMOPLASTIC PAVEMENT MARKING 6" WHITE YELLOW			
SHEET)	NO.		WILL		MARKINGS	TYPE II			6"	
						(YELLOW/YELLOW)			WHITE	YELLOW
					LIN FT.		LIN	.FT.	LIN. FT.	
				WHITE	48		180			
1	03384	1	1.551	YELLOW	180			180		
				R.P.M.		1				
SUBTOTA	LS (DIST. 2):				228	1	180	180		

NOTE: 2 LANE ROAD HAS HIGH TRAFFIC VOLUME IN DISTRICT 2 AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. REFER TO PERMANENT PAVEMENT MARKING DETAILS FOR LIST OF HIGH AND LOW ROADS IN EACH DISTRICT.

FOR 2 LANE ROADS, THE 12" WHITE STOP BAR LIN. FT. QUANTITY FROM THE 2 LANE MAINTENANCE OF TRAFFIC DETAIL IS INCLUDED IN THE REMOVABLE CONSTRUCTION PAVEMENT MARKINGS COLUMN FOR STAGE 1 AND STAGE 2 CONSTRUCTION.

THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING. CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS - DIST. 3 (BOX 2 OF 5)

BR.ID# (TITLE	BR. STRUCTURE	ROUTE	LOG MILE	DESCRIPTION	REMOVABLE CONST. PAVEMENT	RAISED PAVEMENT MARKERS	THERMOPLASTIC PAVEMENT MARKING			
SHEET)	NO.		WILL		MARKINGS	TYPE II	6"		6	
						(YELLOW/YELLOW)	WHITE YELLOW		WHITE	YELLOW
					LIN FT.		LIN. FT.		LIN. FT.	
				WHITE	48				705	
2	02735	26	11.726	YELLOW	705					705
				R.P.M.		4				
SUBTOTA	LS (DIST. 3):				753	4			705	705

NOTE: 2 LANE ROAD HAS LOW TRAFFIC VOLUME IN DISTRICT 3 AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. REFER TO PERMANENT PAVEMENT MARKING DETAILS FOR LIST OF HIGH AND LOW ROADS IN EACH DISTRICT.

FOR 2 LANE ROADS, THE 12" WHITE STOP BAR LIN. FT. QUANTITY FROM THE 2 LANE MAINTENANCE OF TRAFFIC DETAIL IS INCLUDED IN THE REMOVABLE CONSTRUCTION PAVEMENT MARKINGS COLUMN FOR STAGE 1 AND STAGE 2 CONSTRUCTION.

THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING. CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS - DIST. 5 (BOX 3 OF 5)

BR.ID#	BR. STRUCTURE	ROUTE	LOG MILE	DESCRIPTION	REMOVABLE CONST. PAVEMENT	RAISED PAVEMENT MARKERS	THERMO PAVEMEN	PLASTIC MARKING		
SHEET)	NO.		WILE		MARKINGS	TYPE II	6"		6"	
						(YELLOW/YELLOW)	WHITE YELLOW		WHITE	YELLOW
					LIN FT.		LIN	FT.	LIN.	FT.
				WHITE	44				500	
3	01446	367	8.028	YELLOW	500					500
				R.P.M.		2				
				WHITE	44		362			
4	01462	367	5.455	YELLOW	362			362		
				R.P.M.		4				
SUBTOTA	SUBTOTALS (DIST. 5):		950	6	362	362	500	500		

NOTE: 2 LANE ROADS HAVE BOTH HIGH AND LOW TRAFFIC VOLUME IN DISTRICT 5 AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. REFER TO PERMANENT PAVEMENT MARKING DETAILS FOR LIST OF HIGH AND LOW ROADS IN EACH DISTRICT.

FOR 2 LANE ROADS, THE 12" WHITE STOP BAR LIN. FT. QUANTITY FROM THE 2 LANE MAINTENANCE OF TRAFFIC DETAIL IS INCLUDED IN THE REMOVABLE CONSTRUCTION PAVEMENT MARKINGS COLUMN FOR STAGE 1 AND STAGE 2 CONSTRUCTION.

THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING.

CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS - DIST. 7 (BOX 4 OF 5)

	PONSIKUC	TIONE	- A FIAIF	IN I WAKKIN	IGS AND PERIN	ANENI PAVEMENI	MAKKING	10 - DIO I. <i>I</i>	(BUX 4 U	r 3)
	BR. STRUCTURE	ROUTE	LOG MILE	DESCRIPTION		RAISED PAVEMENT MARKERS		THERMOPLASTIC PAVEMENT MARKING		RIZED PAINT FMARKING
SHEET)	NO.		WILL		MARKINGS	TYPE II	6" WHITE YELLOW		6"	
						(YELLOW/YELLOW)			WHITE	YELLOW
					LIN FT.		LIN	.FT.	LIN. FT.	
				WHITE	44		4026			
5	03011	79	7.771	YELLOW	4026			4026		
				R.P.M.		26				
SUBTOTA	SUBTOTALS (DIST. 7):			4070	26	4026	4026			

NOTE: 2 LANE ROAD HAS HIGH TRAFFIC VOLUME IN DISTRICT 2 AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. REFER TO PERMANENT PAVEMENT MARKING DETAILS FOR LIST OF HIGH AND LOW ROADS IN EACH DISTRICT.

FOR 2 LANE ROADS, THE 12" WHITE STOP BAR LIN. FT. QUANTITY FROM THE 2 LANE MAINTENANCE OF TRAFFIC DETAIL IS INCLUDED IN THE REMOVABLE CONSTRUCTION PAVEMENT MARKINGS COLUMN FOR STAGE 1 AND STAGE 2 CONSTRUCTION.

THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING. CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS - DIST. 10 (BOX 5 OF 5)

BR. ID# (TITLE	BR. STRUCTURE	ROUTE	LOG MILE	DESCRIPTION	REMOVABLE CONST. PAVEMENT	RAISED PAVEMENT MARKERS	PAVEMEN	THERMOPLASTIC PAVEMENT MARKING		RIZED PAINT T MARKING
SHEET)	NO.		IVIILL		MARKINGS	TYPE II	6" WHITE YELLOW		6"	
						(YELLOW/YELLOW)			WHITE	YELLOW
					LIN FT.		LIN	l.FT.	LIN. FT.	
				WHITE	48				1400	
6	03253	115	16.045	YELLOW	1400					1400
				R.P.M.		10				
				WHITE	48		550			
7	03083	49	9.207	YELLOW	550			550		
				R.P.M.		2				
				WHITE	48		550			
8	03084	49	8.699	YELLOW	550			550		
				R.P.M.		2				
				WHITE	48		550			
9	03085	49	7.177	YELLOW	550			550		
				R.P.M.		2				
				WHITE	48		550			
10	03086	49	6.177	YELLOW	550			550		
				R.P.M.		3				
SUBTOTA	LS (DIST. 10):		•		3840	19	2200	2200	1400	1400

NOTE: 2 LANE ROADS HAVE BOTH HIGH AND LOW TRAFFIC VOLUME IN DISTRICT 2 AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. REFER TO PERMANENT PAVEMENT MARKING DETAILS FOR LIST OF HIGH AND LOW ROADS IN EACH DISTRICT.

FOR 2 LANE ROADS, THE 12" WHITE STOP BAR LIN. FT. QUANTITY FROM THE 2 LANE MAINTENANCE OF TRAFFIC DETAIL IS INCLUDED IN THE REMOVABLE CONSTRUCTION PAVEMENT MARKINGS COLUMN FOR STAGE 1 AND STAGE 2 CONSTRUCTION.

THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING.

CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

SUBTOTALS DIST. 2 - (BOX 1 OF 5):	228	1	180	180		
SUBTOTALS DIST. 3 - (BOX 2 OF 5):	753	4			705	705
SUBTOTALS DIST. 5 - (BOX 3 OF 5):	950	6	362	362	500	500
SUBTOTALS DIST. 7 - (BOX 4 OF 5):	4070	26	4026	4026		
SUBTOTALS DIST. 10 - (BOX 5 OF 5):	3840	19	2200	2200	1400	1400
PROJECT TOTALS:	9841	56	6768	6768	2605	2605

DISTRICTS 2, 3, 5, 7, & 10 BRIDGES - QUANTITIES - 65175

SCHEDULE OF BRIDGE QUANTITIES - JOB NO. 012392

							SP & 509	SS & 802	SP & 803	SP & 803	SS & 804	SS & 809	821	SP JOB 012392	SP JOB 012392	SP JOB 012392	SP JOB 012392	SP JOB 012392	SP JOB 012392
DISTRICT	SITE NO.	COUNTY	ROUTE	SECTION	LOG MILE	BRIDGE NO.	JOINT REHABILITATION (TYPE A)	GROOVING	CLASS 1 PROTECTIVE SURFACE TREATMENT	CLASS 3 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL-BRIDGE (GRADE 60)	SILICONE JOINT SEALANT	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO)	BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS	HYDRODEMOLITION - CLASS 2	LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK)	RAILING REPAIR	SPALL REPAIR	SURFACE PATCHING
							LIN. FT.	SQ. YD.	GAL.	LIN. FT.	POUND	LIN. FT.	LUMP SUM	SQ. FT.	SQ. YD.	SQ. YD.	LUMP SUM	SQ. FT.	SQ. FT.
2	1	ARKANSAS	HWY. 1	4	1.551	03384 ②③	65	250.0	5.6	180	220			252	280	281		10	5
			TOTALS	FOR DIST	RICT 2		65	250.0	5.6	180	220			252	280	281		10	5
2	2	PIKE	HWY. 26	3	11.726	02735 ①		350.0	8.0	300	310	98 ⑥		360	400	402		5	5
3			TOTALS	FOR DIST	RICT 3			350.0	8.0	300	310	98		360	400	402		5	5
	3	WHITE	HWY. 367	15	8.028	01446 ①	27	134.0	3.0	100	120			135	150	151		60	10
5	4	WHITE	HWY. 367	15	5.455	01462 ②	96	423.0	9.7	362	370			435	483	485		70	10
			TOTALS	FOR DIST	RICT 5		123	557.0	12.7	462	490			570	633	636		130	20
	•									•									
7	5	CLEVELAND	HWY. 79	7	7.771	03011 ②③		5,140.0	116.0	4,023	4,450	1,325 ⑥⑦		5,229	5,810	5,829		140	70
/			TOTALS	FOR DIST	RICT 7			5,140.0	116.0	4,023	4,450	1,325		5,229	5,810	5,829		140	70
										•									
	6	LAWRENCE	HWY. 115	2	16.045	03253 ③④		1,629.0	37.2	1,396	1,430	441 67	1 (8)	1,676	1,862	1,868		50	15
	7	GREENE	HWY. 49	2	9.207	03083 ①	56	209.0	4.7	150	180			210	234	235		5	5
10	8	GREENE	HWY. 49	2	8.699	03084 ①	56	209.0	4.7	150	180			210	234	235		60	10
10	9	GREENE	HWY. 49	2	7.177	03085 ①	65	209.0	4.7	150	180			210	234	235		25	20
	10	GREENE	HWY. 49	2	6.177	03086 (1)	56	209.0	4.7	150	180			210	234	235	1.00	15	5
			TOTALS	FOR DISTR	RICT 10		233	2,465.0	56.0	1,996	2,150	441		2,516	2,798	2,808		155	55
										•							'		
			TOTALS FOR	JOB 012392	2		421	8,762.0	198.3	6,961	7,620 ⑤	1,864		8,927 ⑤	9,921	9,956	1.00	440 ⑤	155 ⑤

- ① EXISTING BRIDGE DECK HAS AN ASPHALT OVERLAY. SEE ROADWAY PLANS FOR AVERAGE DEPTH AT EACH BRIDGE SITE.
- ② EXISTING BRIDGE DECK HAS NO ASPHALT OVERLAY.
- $\ensuremath{\mathfrak{J}}$ existing bridge deck has spalls filled with asphalt.
- 4 EXISTING BRIDGE DECK HAS AN ASPHALT OVERLAY ON BEGINNING AND END SPANS.
- ⑤ QUANTITY SHOWN IS FOR ESTIMATING AND BIDDING PURPOSES ONLY. ACTUAL QUANTITY, IF ANY, WILL BE DETERMINED IN THE FIELD.
- (6) EXISTING BRIDGE HAS SLIDER PLATE JOINTS TO BE PARTIALLY REMOVED AND REPLACED WITH POURED SILICONE JOINTS.
- ② EXISTING BRIDGE HAS FILLED JOINTS TO BE REMOVED AND REPLACED WITH POURED SILICONE JOINTS.
- (8) MODIFICATION OF EXISTING BRIDGE STRUCTURE INCLUDES REPAIR OF BACKWALLS TO MATCH TOP SURFACE OF FINISHED LMC OVERLAY WITH GRADE RAISE ON ADJACENT BRIDGE DECK. SEE STANDARD DRAWING NO. 55065.

REFERENCE TABLE

<u> </u>	TERENOL TROLL
BRIDGE NO.	EXISTING DWG. NO(S).
03384	11028, 5422B
02735	7812, 5193, 5198
01446	2866, 2353
01462	2762, 2329
03011	8936A-8936E, 5453, 5454, 5456
03253	10019, 10019A, 5500, 5500A, 5500P
03083	10826, 5475
03084	10827, 5475
03085	10828, 5475, 5475B
03086	10829, 5475



SCHEDULE OF BRIDGE QUANTITIES HYDRODEMOLITION BRIDGE PRESERVATION (2022) (S) VARIOUS COUNTIES ROUTE VARIES SECTION VARIES

ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARKANSAS

 R. B.
 4101
 DRAWN BY:
 ERBB CHECKED BY:
 DATE:
 02/2022 DATE:
 B012392_Q1.dgn

 BRIDGE ENGINEER PRINT DATE:
 4/26/2022
 DESIGNED BY:
 ERBB ERBB
 DATE:
 02/2022 DATE:
 NO SCALE:
 NO SCALE

 BRIDGE NO. DISTRICTS 2, 3, 5, 7, & 10 BRIDGES
 DRAWING NO.
 65175
 65175

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012392	22	25
		SUN	MARY (F QUANTITIES	AND REV	/ISIONS

5-20-22

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	DIST.2 QUANTITIES	DIST. 3 QUANTITIES	DIST.5 QUANTITIES	DIST. 7 QUANTITIES	DIST, 10 QUANTITIES	PROJECT TOTAL QUANTITIES	UNIT
SS & 401	TACK COAT		166	166		795	1127	GAL.
SP. SS. & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		102	102		488	692	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")		6	6		26	38	TON
SP & 412	COLD MILLING ASPHALT PAVEMENT		895	639		3444	4978	SQ. YD.
601	MOBILIZATION	0.04	0.05	0.07	0.55	0.29	1.00	LUMP SUM
SP, SS, & 603	MAINTENANCE OF TRAFFIC	0.04	0.05	0.07	0.55	0.29	1.00	LUMP SUM
SS & 604	SIGNS						482	SQ.FT.
SS & 604	TRAFFIC DRUMS						111	EACH
SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER						760	LIN.FT.
SS & 604	RELOCATING PRECAST CONCRETE BARRIER						760	LIN.FT.
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	228	753	950	4070	3840	9841	LIN. FT.
SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN						65	WEEK
SS & 604	VERTICAL PANELS						111	EACH
635	ROADWAY CONSTRUCTION CONTROL	0.04	0.05	0.07	0.55	0.29	1.00	LUMP SUM
SP	PORTABLE TRAFFIC SIGNAL SYSTEM - ACTUATED						90	WEEK
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6")		705	500		1400	2605	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")		705	500		1400	2605	LIN.FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	180		362	4026	2200	6768	LIN.FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	180		362	4026	2200	6768	LIN.FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	1	4	6	26	19	56	EACH
	STRUCTURES OVER 20' SPAN							
SP & 509	JOINT REHABILITATION (TYPE A)	65		123		233	421	LIN.FT.
636	BRIDGE CONSTRUCTION CONTROL	0.04	0.05	0.07	0.55	0.29	1.00	LUMP SUM
SS & 802	GROOVING	250.0	350.0	557.0	5140.0	2465.0	8762.0	SQ. YD.
	CLASS 1PROTECTIVE SURFACE TREATMENT	5.6	8.0	12.7	116.0	56	198.3	GAL.
	CLASS 3 PROTECTIVE SURFACE TREATMENT	180	300	462	4023	1996	6961	LIN.FT.
SS & 804	REINFORCING STEEL-BRIDGE (GRADE 60)	220	310	490	4450	2150	7620	POUND
SS & 809	SILICONE JOINT SEALANT		98		1325	441	1864	LIN. FT.
821	MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 03253)					1.00	1.00	LUMP SUM
SP	BRIDGE DECK REPAIR FOR LATEX MODIFIED CONCRETE OVERLAYS	252	360	570	5229	2516	8927	SQ.FT.
SP	HYDRODEMOLITION - CLASS 2	280	400	633	5810	2798	9921	SQ. YD.
SP	LATEX MODIFIED CONCRETE OVERLAY (11/2" THICK)	281	402	636	5829	2808	9956	SQ. YD.
SP	RAILING REPAIR					1.00	1.00	LUMP SUM
SP	SPALL REPAIR	10	5	130	140	155	440	SQ.FT.
SP	SURFACE PATCHING	5	5	20	l 70	55	155	SQ.FT.

REVISIONS

DATE	REVISION	SHEET NUMBER

DISTRICTS 2, 3, 5, 7, & 10 BRIDGES - BRIDGE DATA - 65176

BRIDGE PRESERVATION DATA TABLE (DISTRICT 2)

CURRENT CONST. CONTRACT SITE NO.	BRIDGE NO.	ORIGINAL CONTRACT NO.	COUNTY	ROUTE	SECTION	SUPERSTRUCTURE TYPE	DECK TREATMENT TYPE	DECK TREATMENT STD. DRAWINGS	GRADE RAISE NEEDED FOR LMC OVERLAY?	BRIDGE JOINT TREATMENT STD. DRAWING	BRIDGE JOINT TREATMENT LOCATION
1	03384	2599	ARKANSAS	HWY. 1	4	VOIDED CONCRETE SLAB	HYDRODEMOLITION	55063	NO	NO STD. DWG USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 2 & 3

BRIDGE PRESERVATION DATA TABLE (DISTRICT 3)

CURRENT CONST. CONTRACT SITE NO.	BRIDGE NO.	ORIGINAL CONTRACT NO.	COUNTY	ROUTE	SECTION	SUPERSTRUCTURE TYPE	DECK TREATMENT TYPE	DECK TREATMENT STD, DRAWINGS	GRADE RAISE NEEDED FOR LMC OVERLAY?	BRIDGE JOINT TREATMENT STD. DRAWING	BRIDGE JOINT TREATMENT LOCATION
2	02735	3407	PIKE	HWY. 26	3	STEEL I-BEAM	HYDRODEMOLITION	55060	NO	55064	BENTS 1-4

BRIDGE PRESERVATION DATA TABLE (DISTRICT 5)

CURRENT CONST. CONTRACT SITE NO.	BRIDGE NO.	ORIGINAL CONTRACT NO.	COUNTY	ROUTE	SECTION	SUPERSTRUCTURE TYPE	DECK TREATMENT TYPE	DECK TREATMENT STD. DRAWINGS	GRADE RAISE NEEDED FOR LMC OVERLAY?	BRIDGE JOINT TREATMENT STD. DRAWING	BRIDGE JOINT TREATMENT LOCATION
3	01446	595	WHITE	HWY. 367	15	RCDG	HYDRODEMOLITION	55062	NO	NO STD. DWG USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENT 2
4	01462	595	WHITE	HWY. 367	15	RCDG	HYDRODEMOLITION	55062	NO	NO STD. DWG USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 2-5

BRIDGE PRESERVATION DATA TABLE (DISTRICT 7)

CURRENT CONST. CONTRACT SITE NO.	BRIDGE NO.	ORIGINAL CONTRACT NO.	COUNTY	ROUTE	SECTION	SUPERSTRUCTURE TYPE	DECK TREATMENT TYPE	DECK TREATMENT STD. DRAWINGS	GRADE RAISE NEEDED FOR LMC OVERLAY?	BRIDGE JOINT TREATMENT STD. DRAWING	BRIDGE JOINT TREATMENT LOCATION
5	03011	2505	CLEVELAND	HWY. 79	7	STEEL I-BEAM	HYDRODEMOLITION	55060	NO	55064	BENTS 1-48 & PIERS 1-2

BRIDGE PRESERVATION DATA TABLE (DISTRICT 10)

							ı				
CURRENT CONST. CONTRACT SITE NO.	BRIDGE NO.	ORIGINAL CONTRACT NO.	COUNTY	ROUTE	SECTION	SUPERSTRUCTURE TYPE	DECK TREATMENT TYPE	DECK TREATMENT STD. DRAWINGS	GRADE RAISE NEEDED FOR LMC OVERLAY?	BRIDGE JOINT TREATMENT STD. DRAWING	BRIDGE JOINT TREATMENT LOCATION
6	03253	03253 10638 LAV		HWY. 115	2	STEEL I-BEAM	HYDRODEMOLITION	55061	YES	55064 & 55065	BENTS 1 & 16 (BOTH WITH BACKWALL REPAIR), BENTS 2-15, & PIERS 1-2
7	03083	10581	GREENE	HWY. 49	2	R.C. SLAB	HYDRODEMOLITION	55062	NO	NO STD. DWG USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 2 & 3
8	03084	10581	GREENE	HWY. 49	2	R.C. SLAB	HYDRODEMOLITION	55062	NO	NO STD. DWG USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 2 & 3
9	03085	10581	GREENE	HWY. 49	2	R.C. SLAB	HYDRODEMOLITION	55062	NO	NO STD. DWG USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 2 & 3
10	03086	10581	GREENE	HWY. 49	2	R.C. SLAB	HYDRODEMOLITION	55062	NO	NO STD. DWG USE TYPE A JOINT REHAB AND SP. SEE ROADWAY SPECIAL DETAILS.	BENTS 2 & 3

PROFESSIONAL ENGINEER

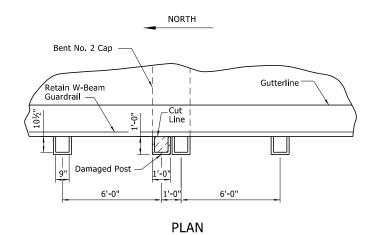
BRIDGE PRESERVATION DATA TABLE DISTRICTS 2, 3, 5, 7, & 10 ROUTE VARIES SECTION VARIES

ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARKANSAS

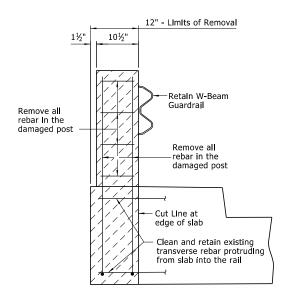
| DRAWN BY: | ERBB | DATE: | 02/2022 | O3/2022 | O3/2022

NORTH -Damaged Post Bent No. 2

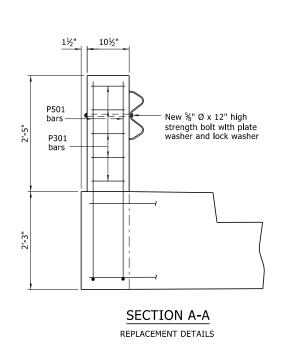
Any area of the existing concrete curb that is spalled is to be repaired at the direction of the Engineer using items "SURFACE PATCHING" or "SPALL REPĂIR". See SP Job 012392 "CONCRETE REPAIRS".

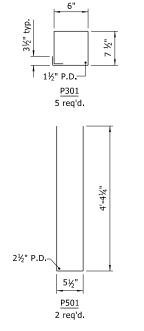


ELEVATION Looking EAST



SECTION A-A REMOVAL DETAILS





GENERAL NOTES

Concrete shall be Class "S(AE)" with a minimum 28 day compressive strength f'c = 4,000 psi and shall be poured in the dry.

All exposed corners shall be chamfered ¾" unless otherwise noted.

REINFORCING STEEL All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Any additional reinforcing required by the Engineer in the field that is to be doweled Into existing concrete shall be Installed Into drilled holes and secured using an approved non-shrink grout or resin anchoring system listed on the QPL. The diameter of the drilled holes and the installation procedures shall be as recommended by the grout manufacturer or the resin anchoring system manufacturer.

The cost of all materials, labor, equipment, and incidentals to repair the damaged portion of railing shall be included in the Item "RAILING REPAIR". See SP Job 012392 "RAILING REPAIR".

HECENSED PROFESSIONAL ENGINEER * * * No.20113

RAILING REPAIR DETAILS ROUTE SECTION

ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARKANSAS

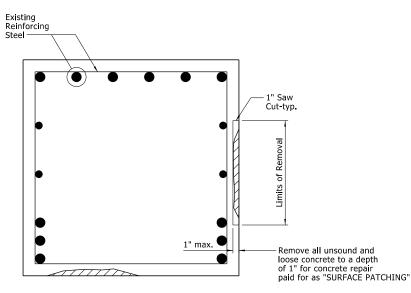
BRIDGE ENGINEER PRINT DATE: 4/26/2022 BRIDGE NO. 03086

DATE: 03/2022 DATE: 03/2022 DATE: 03/2022 __ FILENAME: B012392_RAIL.dgn DRAWN BY: CHECKED BY: DESIGNED BY: SCALE: NO SCALE DRAWING NO. 65177

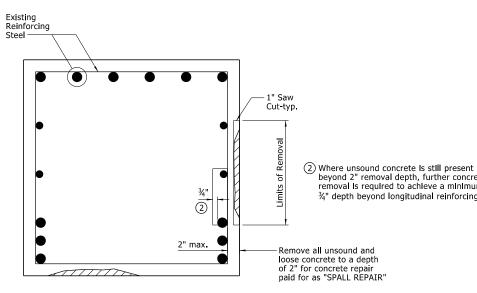
Saw Cut 1" deep - typ. Pay Limits - typ. Denotes area of existing concrete to be repaired.

1 Saw cut existing concrete 1" deep to neat lines to obtain a rectangular area.

SAW CUT DETAIL



SURFACE PATCH DETAIL



SPALL REPAIR DETAIL

CONCRETE REPAIR NOTES

- Concrete repairs shall be performed in accordance with Special Provision Job. No. 012392 "CONCRETE REPAIRS".
- 2. Limits shown are not exact areas and locations but are representative of potential spall repair areas to be encountered. The final limits and locations shall be determined
- 3. Concrete repairs shall consist of removing all unsatisfactory concrete described as follows: any loose, delaminated, unsound, severely spalled or deteriorated concrete and replacing with an approved material listed in Special Provision Job. No. 012392 "CONCRETE REPAIRS".
- Saw cut around all damaged areas as shown on the "SAW CUT DETAIL". Exercise caution during the saw cutting operation. Any reinforcement damaged during the saw cutting will be replaced at the contractor's expense.
- 5. Concrete repairs shall be paid for under the item "SURFACE PATCHING" when the depth of repair is 1" or less.
- 6. Concrete repairs shall be paid for under the item "SPALL REPAIR" when the depth of the repair exceeds 1". The minimum depth of spall repair shall extend to the face of transverse reinforcing steel or to sound concrete. The exposed reinforcing steel shall be blast cleaned prior to applying the concrete mortar.
- 7. The surface of the concrete to be repaired under the items "SURFACE PATCHING" or "SPALL REPAIR" shall be prepared in accordance with the repair mortar manufacturer's recommendations.
- 8. Areas to be repaired under the item "SURFACE PATCHING" shall utilize "Rapid Set Mortar Mix" manufactured by CTS Cement. The contractor may submit an alternate product for review and approval.
- 9. Areas to be repaired under the item "SPALL REPAIR" shall utilize either "Rapid Set Mortar Mix" or "Rapid Set Concrete Mix" manufactured by CTS Cement. The appropriate product shall be determined by the actual depth of repair encountered. The contractor may submit an alternate product for approval.
- 10. After all concrete repairs are completed, the repaired concrete surfaces shall receive a Class 2 Protective Surface Treatment. The cost of the Class 2 Treatment shall be Included In the Item "SURFACE PATCHING" or "SPALL REPAIR".

FICENSED PROFESSIONAL ENGINEER No.20113 BRIDGE ENGINEER

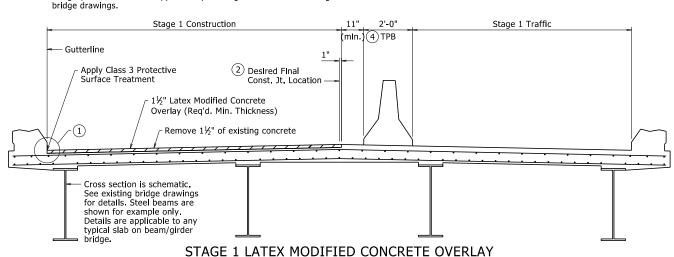
beyond 2" removal depth, further concrete removal is required to achieve a minimum 3/4" depth beyond longitudinal reinforcing.

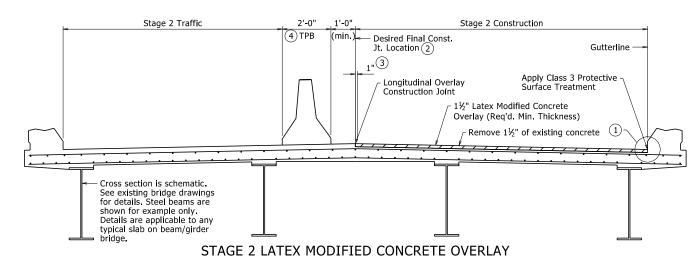
> CONCRETE REPAIR DETAILS ROUTE SECTION ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARKANSAS

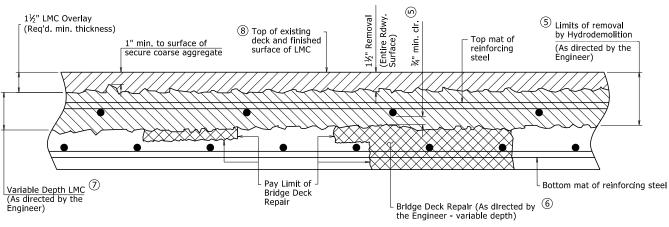
DATE: 03/2022 DATE: 03/2022 DATE: 03/2022 _ FILENAME: B012392_SPALL.dgn SCALE: ___ DESIGNED BY: BRIDGE NO. ALL BRIDGES PRINT DATE: 4/26/2022 DRAWING NO. 65178

Stages of construction and traffic refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details, Numbering is shown for general purposes. See Roadway Plans for specific sequencing

The minimum overlay placement length shall be a span length on simple span bridges and to an existing slab joint on continuous span bridges, unless otherwise approved by the Engineer. Refer to existing







DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

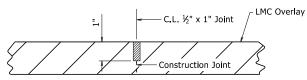
- \triangle (5) Removal of unsound concrete beyond 1½" below the original surface shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of 3/4" clearance below the bar. This removal shall be subsidiary to the item Job SP "Hydrodemolition -
 - (6) Areas requiring additional repair, as determined by the Engineer, shall be repaired in accordance with the Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays".
- Depth varies to achieve minimum clearance below top mat of reinforcing steel, where required.
- 8 Finished surface of LMC Overlay shall match existing concrete deck surfaces unless Increase Is required to maintain minimum required LMC Overlay thickness and a minimum of 1½" cover to reinforcing steel and shear connectors.

(1) Hand tools shall be used as required to remove concrete adjacent to curbs, rails, and armored expansion joints.

NOTE: Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, adjust hydrodemolition and latex

nodified concrete overlay operations and details accordingly.

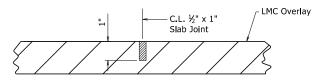
- (2) For staged construction, the final construction joint location shall be established by the Engineer to satisfy MOT and construction requirements. The desired location is at the C.L. Bridge, C.L. Lane, or Edge of Lane, but in no case shall be positioned in the line of a wheel path.
- 3 For staged construction, saw cut and remove 1" of initial Latex Modified Concrete Overlay when preparing surface for adiacent overlay.
- 4 For staged construction, Temporary Precast Barrier (TPB) shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4 for additional details. Plastic drums shall be used in lieu of concrete barriers where shown in the Roadway Plans, see Std. Dwg. TC-3 for additional details.



Use $\frac{1}{2}$ " x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Seal color shall be gray

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

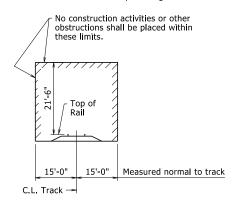
For Staged Construction



Use ½" x 1" Type 3 or 4 Joint Sealer, See Subsections 501.02(h) and 501.05(i). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Slab joints shall extend from gutterline to gutterline. Slab joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Slab joints shall be placed at all pouring sequence construction joints and are regulred at existing slab joint locations. Pouring sequence construction joints shall align between stages of construction. The joint sealer shall extend across the deck from gutterline to gutterline. Seal color shall be gray or other color similar to concrete.

TRANSVERSE OVERLAY JOINT DETAIL

For Continuous Span Bridges



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

See Job SP "Insurance, Construction, and Flagging Requirements on Rallroad Property" for additional railroad construction requirements.

1 Modified Hydrodemolition SP reference to include "- Class _". By: KWY, Checked by: SWP; 1/9/2020.

Modified Joint Rehabilitation to include unarmored joints. By: KWY, Checked by: SWP; 6/25/2020.

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 7, 2019 This copy is not a signed and sealed document.



FED. AID PROJ. NO. SHEET FILMED 6 JOB NO.

GENERAL NOTES:

HYDRO/LMC OVERLAY - 55060

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and bsection refer to the Standard Specifications unless otherwise noted in the Plans.

Details shown are schematic. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure(s).

The operation or placement of vehicles, equipment, and/or materials on the subject bridge(s) necessary for the completion of this work shall be evaluated in accordance with Subsection 105.14. Certifications of the adequacy of all components for the anticipated loads shall address the capacity of the existing structure at all phases of

Where applicable, construction activities for the existing bridge(s) over roadways and railroads shall be in accordance with the Job SP "Special Safety Requirements for Bridges" and as shown in "Minimum Construction Clearance Envelope".

1 HYDRODEMOLITION: The entire roadway surface of the existing bridge deck and approach slabs and gutters, as applicable, shall receive hydrodemolition in accordance with the Job SP "Hydrodemolition - Class" to a planned depth of 1½" below the existing bridge deck surface. Deteriorated concrete in the bridge deck below this depth shall be removed at the direction of the Engineer and up to the limits detailed. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Hydrodemolition - Class". Prior to hydrodemolition, cold milling of the concrete deck to a maximum depth of 1" will be allowed unless there will be a conflict with the existing reinforcing steel,

BRIDGE DECK REPAIR: After hydrodemolition, the deck surface shall be sounded and any areas of unsound, delaminated, or otherwise deteriorated concrete shall be removed at the direction of the Engineer and in accordance with Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays"

LATEX MODIFIED CONCRETE OVERLAY: The entire area of the hydrodemolition shall receive a Latex Modified Concrete (LMC) Overlay to a planned depth of 11/5" below the existing bridge deck surface in accordance with Job SP "Latex Modified Concrete Overlay. These areas shall be measured by the square yard and shall be pald for at the unit price bid for the Item Job SP "Latex Modified Concrete Overlay (1½" Thick)". Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than 1½" below the existing bridge deck surface shall be filled with LMC concurrent to the placement of the $1\frac{1}{2}$ " LMC Overlay. This area shall be measured and paid for in accordance with Job SP "Latex Modified Concrete

GROOVED FINISH: The LMC Overlay surface of the bridge deck and approach slabs and gutters, as applicable, shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish and in accordance with Job SP "Latex Modified Concrete Overlay"

PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the LMC Overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Job SP "Latex Modified Concrete Overlay". The roadway surface of the completed LMC Overlay shall be given a Class 1 Protective Surface Treatment as specified in Section

2 JOINT REHABILITATION: After the placement of the LMC Overlay and if shown in the plans, the existing armored joints shall be given a poured silicone joint sealant as specified in Section 809 and as shown in "Poured Silicone Joint Seal Details" on Standard Drawing No. 55064, and the existing unarmored joints shall be given a Type A Joint Rehabilitation as specified in Section 509 and Job SP "Joint Rehabilitation for Bridge Decks". Backwall repair, if shown in the plans or as directed by the Engineer, shall be completed prior to installation of the joint sealant.

If shown in the plans, the existing neoprene strip seal shall be removed and replaced. See "Strip Seal Joint Details" on Standard Drawing No. 55064.

NOTE: When "Very Early Strength Latex Modified Concrete Overlay (1½" Thick)" Is shown in the plans for a particular bridge, all reference to "Latex Modified Concrete Overlay" and "LMC" on this sheet shall be considered synonymous with "Very Early Strength Latex Modified Concrete Overlay" and "VESLMC" for that bridge. See Job SP "Very Early Strength Latex Modified Concrete Overlay" for additional information.

STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY SLAB ON BEAM/GIRDER BRIDGES

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK. DRAWN BY: KWY ___ DATE: 11/7/2019 FILENAME: b55060.dgn CHECKED BY: SWP DATE: 11/7/2019

DESIGNED BY: STD.

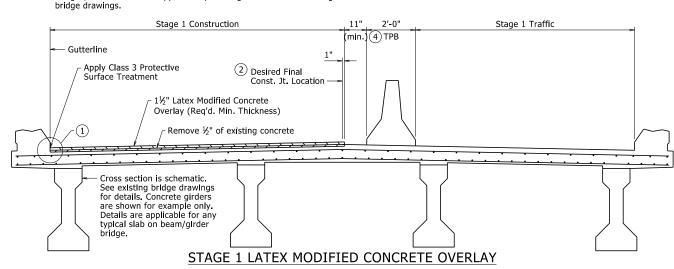
DRAWING NO. 55060

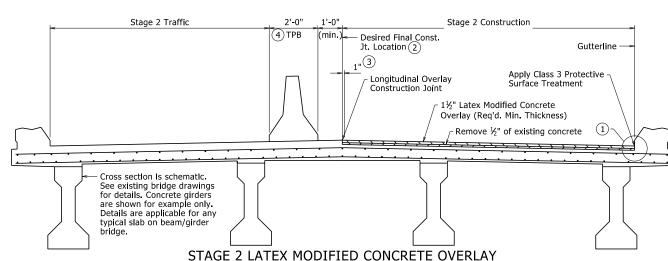
SCALE: None

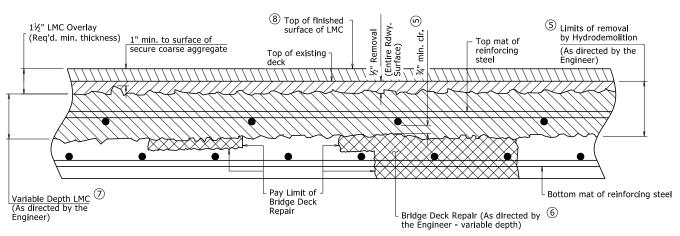
BRIDGE ENGINEER

Stages of construction and traffic refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details. Numbering is shown for general purposes. See Roadway Plans for specific sequencing.

The minimum overlay placement length shall be a span length on simple span bridges and to an existing slab joint on continuous span bridges, unless otherwise approved by the Engineer. Refer to existing







DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

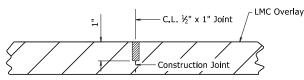
- ⚠ ⑤ Removal of unsound concrete beyond ½" below the original surface shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of ¾" clearance below the bar. This removal shall be subsidiary to the item Job SP "Hydrodemolition Class _".
- 6 Areas requiring additional repair, as determined by the Engineer, shall be repaired in accordance with the Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays".
- ⑦ Depth varies to achieve minimum clearance below top mat of reinforcing steel, where required.
- 8 Finished surface of LMC Overlay shall be increased as required to maintain minimum required LMC Overlay thickness and a minimum of 1½" cover to reinforcing steel and shear connectors,

1 Hand tools shall be used as required to remove concrete adiacent to curbs, rails, and armored expansion joints.

NOTE: Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, adjust hydrodemolition and latex

nodified concrete overlay operations and details accordingly.

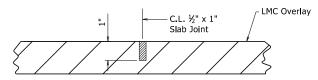
- ② For staged construction, the final construction joint location shall be established by the Engineer to satisfy MOT and construction requirements. The desired location is at the C.L. Bridge, C.L. Lane, or Edge of Lane, but in no case shall be positioned in the line of a wheel path.
- (3) For staged construction, saw cut and remove 1" of initial Latex Modified Concrete Overlay when preparing surface for adjacent overlay.
- 4 For staged construction, Temporary Precast Barrier (TPB) shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4 for additional details. Plastic drums shall be used in lieu of concrete barriers where shown in the Roadway Plans, see Std. Dwg. TC-3 for additional details.



Use $\frac{1}{2}$ " x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Seal color shall be gray or other color similar to concrete.

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

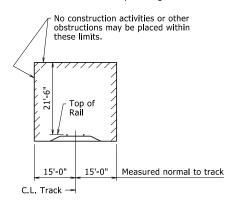
For Staged Construction



Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Slab joints shall extend from gutterline to gutterline. Slab joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Slab joints shall be placed at all pouring sequence construction joints and are required at existing slab joint locations. Pouring sequence construction joints shall align between stages of construction. The joint sealer shall extend across the deck from gutterline to gutterline. Seal color shall be gray or other color similar to concrete.

TRANSVERSE OVERLAY JOINT DETAIL

For Continuous Span Bridges



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

See Job SP "Insurance, Construction, and Flagging Requirements on Rallroad Property" for additional railroad construction requirements.

Modified Hydrodemolition SP reference to include "- Class _". By: KWY, Checked by: SWP; 1/9/2020.

Modified Joint Rehabilitation to include unarmored joints. By: KWY, Checked by: SWP; 6/25/2020.

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 7, 2019 This copy is not a signed and sealed document.



GENERAL NOTES:

HYDRO/LMC OVERLAY - 55061

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and Subsection refer to the Standard Specifications unless otherwise noted in the Plans.

Details shown are schematic. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure(s).

The operation or placement of vehicles, equipment, and/or materials on the subject bridge(s) necessary for the completion of this work shall be evaluated in accordance with Subsection 105.14. Certifications of the adequacy of all components for the anticipated loads shall address the capacity of the existing structure at all phases of this work.

Where applicable, construction activities for the existing bridge(s) over roadways and railroads shall be in accordance with the Job SP "Special Safety Requirements for Bridges" and as shown in "Minimum Construction Clearance Envelope".

⚠ HYDRODEMOLITION: The entire roadway surface of the existing bridge deck and approach slabs and gutters, as applicable, shall receive hydrodemolition in accordance with the Job SP "Hydrodemolition - Class _" to a planned depth of ½" below the existing bridge deck surface. Deteriorated concrete in the bridge deck below this depth shall be removed at the direction of the Engineer and up to the limits detailed. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Hydrodemolition - Class "."

BRIDGE DECK REPAIR: After hydrodemolition, the deck surface shall be sounded and any areas of unsound, delaminated, or otherwise deteriorated concrete shall be removed at the direction of the Engineer and in accordance with Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays".

LATEX MODIFIED CONCRETE OVERLAY: The entire area of the hydrodemolition shall receive a Latex Modified Concrete (LMC) Overlay with a minimum thickness of $1\frac{1}{2}$ " in accordance with Job SP "Latex Modified Concrete Overlay". These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Latex Modified Concrete Overlay ($1\frac{1}{2}$ " Thick)". Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than $\frac{1}{2}$ " below the existing bridge deck surface shall be filled with LMC concurrent to the placement of the $1\frac{1}{2}$ " LMC Overlay. This area shall be measured and paid for in accordance with Job SP "Latex Modified Concrete Overlay".

GROOVED FINISH: The LMC Overlay surface of the bridge deck and approach slabs and gutters, as applicable, shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish and in accordance with Job SP "Latex Modified Concrete Overlay".

PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the LMC Overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Job SP "Latex Modified Concrete Overlay". The roadway surface of the completed LMC Overlay shall be given a Class 1 Protective Surface Treatment as specified in Section 803.

△ JOINT REHABILITATION: After the placement of the LMC Overlay and if shown in the plans, the existing armored joints shall be given a poured silicone joint sealant as specified in Section 809 and as shown in "Poured Silicone Joint Seal Details" on Standard Drawing No. 55064, and the existing unarmored joints shall be given a Type A Joint Rehabilitation as specified in Section 509 and Job SP "Joint Rehabilitation for Bridge Decks". Backwall repair, if shown in the plans or as directed by the Engineer, shall be completed prior to installation of the joint sealant.

If shown In the plans, the existing neoprene strip seal shall be removed and replaced. See "Strip Seal Joint Details" on Standard Drawing No. 55064.

NOTE: When "Very Early Strength Latex Modified Concrete Overlay (1½" Thick)" is shown in the plans for a particular bridge, all reference to "Latex Modified Concrete Overlay" and "LMC" on this sheet shall be considered synonymous with "Very Early Strength Latex Modified Concrete Overlay" and "VESLMC" for that bridge. See Job SP "Very Early Strength Latex Modified Concrete Overlay" for additional information.

STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY SLAB ON BEAM/GIRDER BRIDGES WITH GRADE RAISE

ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARK.

 DRAWN BY:
 KWY
 DATE:
 11/7/2019
 FILENAME:
 b55061.dgn

 CHECKED BY:
 SWP
 DATE:
 11/7/2019
 SCALE:
 None

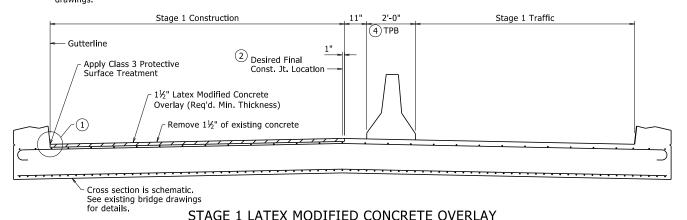
 DESIGNED BY:
 STD.
 DATE:
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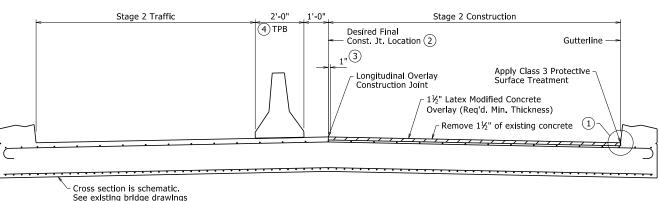
DRAWING NO. 55061

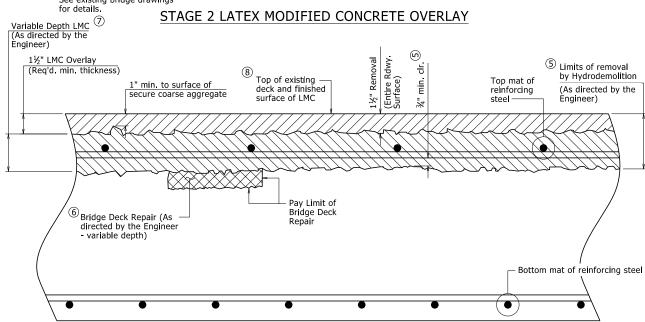
PRINT DATE: 11/4/2020

Stages of Construction refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details. Numbering is shown for general purposes. See Roadway Plans for specific sequencing.

The minimum overlay placement length shall be a span length on simple span bridges and to a slab joint on continuous span, unless otherwise approved by the Engineer. Refer to existing bridge







DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

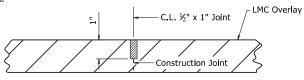
- $\stackrel{ ext{ (5)}}{ ext{ (5)}}$ Removal of unsound concrete beyond 1½" below the original surface shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of 3/4" clearance below the bar, This removal shall be subsidiary to the Item Job SP "Hydrodemolition -
- 6 Areas requiring additional repair, as determined by the Engineer, shall be repaired in accordance with the Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays".
- Depth varies to achieve minimum clearance below top mat of einforcing steel, where required
- 8 Finished surface of LMC Overlay shall match existing concrete deck surfaces unless increase is required to maintain minimum required LMC Overlay thickness and a minimum of 1½" cover to reinforcing steel.

(1) Hand tools shall be used as required to remove concrete adjacent to curbs, rails, and armored expansion joints.

NOTE: Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, adjust hydrodemolition and latex

nodified concrete overlay operations and details accordingly.

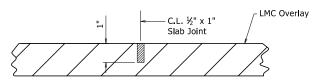
- 2 For staged construction, the final construction joint location shall be established by the Engineer to satisfy MOT and construction requirements. The desired location is at the C.L. Bridge, C.L. Lane, or Edge of Lane, but in no case shall be positioned in the line of a wheel path.
- (3) For staged construction, saw cut and remove 1" of initial Latex Modified Concrete Overlay when preparing surface for adiacent overlay.
- (4) For staged construction, Temporary Precast Barrier (TPB) shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4 for additional details. Plastic drums shall be used in lieu of concrete barriers where shown in the Roadway Plans, see Std. Dwg. TC-3 for additional details.



Use $\frac{1}{2}$ " x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Seal color shall be gray

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

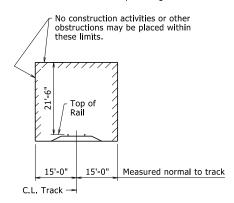
For Staged Construction



Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(i). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Slab joints shall extend from gutterline to gutterline. Slab joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Slab joints shall be placed at all pouring sequence construction joints and are regulred at existing slab joint locations. Pouring sequence construction joints shall align between stages of construction. The joint sealer shall extend across the deck from gutterline to gutterline. Seal color shall be gray or other color similar to concrete.

TRANSVERSE OVERLAY JOINT DETAIL

For Continuous Span Bridges



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

See Job SP "Insurance, Construction, and Flagging Requirements on Rallroad Property" for additional railroad construction requirements.

1\ Modified Hydrodemolition SP reference to include "- Class _". By: KWY, Checked by: SWP, 1/9/2020.

2 Modified Joint Rehabilitation for additional clarification of unarmored By: KWY, Checked by: SWP; 6/25/2020.

> This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 7, 2019 This copy is not a signed and sealed document.



FED. AID PROJ. NO. SHEET FILMED 6 6/25/2020 JOB NO.

GENERAL NOTES:

HYDRO/LMC OVERLAY - 55062

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and bsection refer to the Standard Specifications unless otherwise noted in the Plans.

Details shown are schematic. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure(s).

The operation or placement of vehicles, equipment, and/or materials on the subject bridge(s) necessary for the completion of this work shall be evaluated in accordance with Subsection 105.14. Certifications of the adequacy of all components for the anticipated loads shall address the capacity of the existing structure at all phases of

Where applicable, construction activities for the existing bridge(s) over roadways and railroads shall be in accordance with the Job SP "Special Safety Requirements for Bridges" and as shown in "Minimum Construction Clearance Envelope".

1 HYDRODEMOLITION: The entire roadway surface of the existing bridge deck and approach slabs and gutters, as applicable, shall receive hydrodemolition in accordance with the Job SP "Hydrodemolition - Class" to a planned depth of 1½" below the existing bridge deck surface. Deteriorated concrete in the bridge deck below this depth shall be removed at the direction of the Engineer and up to the limits detailed. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Hydrodemolition - Class". Prior to hydrodemolition, cold milling of the concrete deck to a maximum depth of 1" will be allowed unless there will be a conflict with the existing reinforcing steel,

BRIDGE DECK REPAIR: After hydrodemolition, the deck surface shall be sounded and any areas of unsound, delaminated, or otherwise deteriorated concrete shall be removed at the direction of the Engineer and in accordance with Job SP "Bridge Deck Repair for Latex Modified Concrete Overlays"

LATEX MODIFIED CONCRETE OVERLAY: The entire area of the hydrodemolition shall receive a Latex Modified Concrete (LMC) Overlay to a planned depth of 11/5" below the existing bridge deck surface in accordance with Job SP "Latex Modified Concrete Overlay. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the Item Job SP "Latex Modified Concrete Overlay (1½" Thick)". Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than 1½" below the existing bridge deck surface shall be filled with LMC concurrent to the placement of the $1\frac{1}{2}$ " LMC Overlay. This area shall be measured and paid for in accordance with Job SP "Latex Modified Concrete

GROOVED FINISH: The LMC Overlay surface of the bridge deck and approach slabs and gutters, as applicable, shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish and in accordance with Job SP "Latex Modified Concrete Overlay"

PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the LMC Overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Job SP "Latex Modified Concrete Overlay". The roadway surface of the completed LMC Overlay shall be given a Class 1 Protective Surface Treatment as specified in Section

2 JOINT REHABILITATION: After the placement of the LMC Overlay and if shown in the plans, the existing armored joints shall be given a poured silicone joint sealant as specified in Section 809 and as shown in "Poured Silicone Joint Seal Details" on Standard Drawing No. 55064, and the existing unarmored joints shall be given a Type A Joint Rehabilitation as specified in Section 509 and Job SP "Joint Rehabilitation for Bridge Decks". Backwall repair, If shown in the plans or as directed by the Engineer, shall be completed prior to installation of the joint sealant.

NOTE: When "Very Early Strength Latex Modified Concrete Overlay (1½" Thick)" is shown in the plans for a particular bridge, all reference to "Latex Modified Concrete Overlay" and "LMC" on this sheet shall be considered synonymous with "Very Early Strength Latex Modified Concrete Overlay" and "VESLMC" for that bridge. See Job SP "Very Early Strength Latex Modified Concrete Overlay" for additional information.

STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY REINFORCED CONCRETE SLAB STRUCTURES

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK. DRAWN BY: KWY DATE: 11/7/2019 FILENAME: b55062.dgn CHECKED BY: SWP DATE: 11/7/2019

DESIGNED BY: STD.

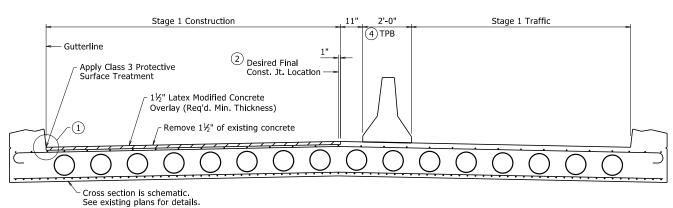
SCALE: None DRAWING NO. 55062

Stages of Construction refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details, Numbering is shown for

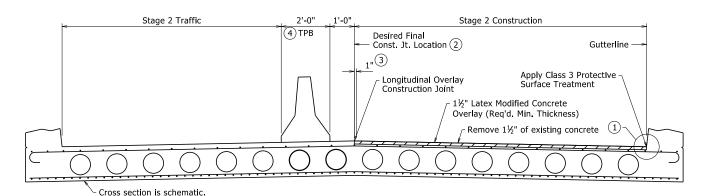
general purposes. See Roadway Plans for specific sequencing.

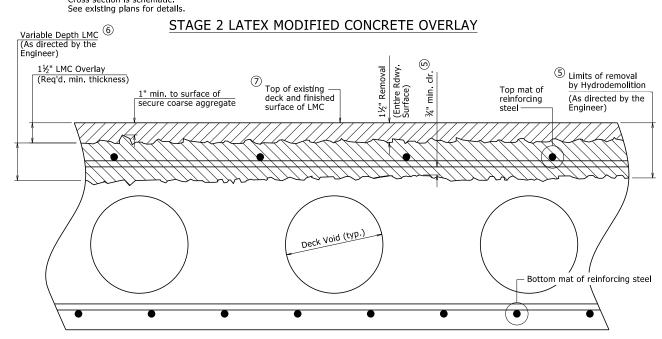
The minimum overlay placement length shall be a span length. Refer

to existing bridge drawings



STAGE 1 LATEX MODIFIED CONCRETE OVERLAY





DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

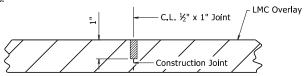
- shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of ¾" clearance below the bar. This removal shall be subsidiary to the item Job SP "Hydrodemolition -
- 6 Depth varies to achieve minimum clearance below top mat of einforcing steel, where required.
- Tinished surface of LMC Overlay shall match existing concrete deck surfaces unless increase is required to maintain minimum required LMC Overlay thickness and a minimum of 1½" cover to reinforcing steel.

(1) Hand tools shall be used as required to remove concrete adiacent to curbs and rails

NOTE: Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, adjust hydrodemolition and latex

nodified concrete overlay operations and details accordingly.

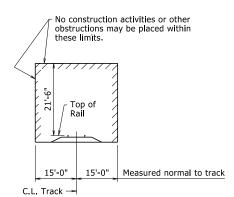
- 2 For staged construction, the final construction joint location shall be established by the Engineer to satisfy MOT and construction requirements. The desired location is at the C.L. Bridge, C.L. Lane, or Edge of Lane, but in no case shall be positioned in the line of a wheel path.
- (3) For staged construction, saw cut and remove 1" of initial Latex Modified Concrete Overlay when preparing surface for adiacent overlay.
- (4) For staged construction, Temporary Precast Barrier (TPB) shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4 for additional details. Plastic drums shall be used in lieu of concrete barriers where shown in the Roadway Plans, see Std. Dwg. TC-3 for additional details.



Use $\frac{1}{2}$ " x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod will not be required. Joint Sealer shall be measured and paid for as LMC Overlay. Longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the overlay. Seal color shall be gray

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

For Staged Construction



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

See Job SP "Insurance, Construction, and Flagging Requirements on Rallroad Property" for additional railroad construction requirements.

If the hydrodemolition equipment blows through the deck and into a deck yold, that area shall be the responsibility of the Contractor and shall be repaired at the Contractor's expense. The Contractor shall provide a method of handling unexpected blow through.

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FED. AID PROJ. NO. SHEET FILMED 6 6/25/2020 JOB NO.

GENERAL NOTES:

HYDRO/LMC OVERLAY - 55063

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and bsection refer to the Standard Specifications unless otherwise noted in the Plans.

Details shown are schematic. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure(s).

The operation or placement of vehicles, equipment, and/or materials on the subject bridge(s) necessary for the completion of this work shall be evaluated in accordance with Subsection 105.14. Certifications of the adequacy of all components for the anticipated loads shall address the capacity of the existing structure at all phases of

Where applicable, construction activities for the existing bridge(s) over roadways and railroads shall be in accordance with the Job SP "Special Safety Requirements for Bridges" and as shown in "Minimum Construction Clearance Envelope".

1 HYDRODEMOLITION: The entire roadway surface of the existing bridge deck and approach slabs and gutters, as applicable, shall receive hydrodemolition in accordance with the Job SP "Hydrodemolition - Class" to a planned depth of 1½" below the existing bridge deck surface. Deteriorated concrete in the bridge deck below this depth shall be removed at the direction of the Engineer and up to the limits detailed. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Hydrodemolition - Class". Prior to hydrodemolition, cold milling of the concrete deck to a maximum depth of 1" will be allowed unless there will be a conflict with the existing reinforcing steel,

LATEX MODIFIED CONCRETE OVERLAY: The entire area of the hydrodemolition shall receive a Latex Modified Concrete (LMC) Overlay to a planned depth of 1½" below the existing bridge deck surface in accordance with Job SP "Latex Modified Concrete Overlay". These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Job SP "Latex Modified Concrete Overlay (1½" Thick"). Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than $1\frac{1}{2}$ " below the existing bridge deck surface shall be filled with LMC concurrent to the placement of the 1½" LMC Overlay. This area shall be measured and paid for in accordance with Job SP "Latex Modified Concrete

GROOVED FINISH: The LMC Overlay surface of the bridge deck and approach slabs and gutters, as applicable, shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish and in accordance with Job SP "Latex Modified Concrete Overlay"

PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the LMC Overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Job SP "Latex Modified Concrete Overlay". The roadway surface of the completed LMC Overlay shall be given a Class 1 Protective Surface Treatment as specified in Section

2 JOINT REHABILITATION: After the placement of the LMC Overlay and if shown in the plans, the existing armored joints shall be given a poured silicone joint sealant as specified in Section 809 and as shown in "Poured Silicone Joint Seal Details" on Standard Drawling No. 55064, and the existing unarmored joints shall be given a Type A Joint Rehabilitation as specified in Section 509 and Job SP "Joint Rehabilitation for Bridge Decks". Backwall repair, if shown in the plans or as directed by the Engineer, shall be completed prior to installation of the joint sealant.

Modified Hydrodemolition SP reference to include "- Class _". By: KWY, Checked by: SWP; 1/9/2020.

A Modified Joint Rehabilitation to include armored joints. By: KWY, Checked by: SWP, 6/25/2020.

NOTE: When "Very Early Strength Latex Modified Concrete Overlay (1½" Thick)" is shown in the plans for a particular bridge, all reference to "Latex Modified Concrete Overlay" and "LMC" on this sheet shall be considered synonymous with "Very Early Strength Latex Modified Concrete Overlay" and "VESLMC" for that bridge. See Job SP "Very Early Strength Latex Modified Concrete Overlay" for additional information.

STANDARD DETAILS FOR HYDRODEMOLITION AND LMC OVERLAY **VOIDED CONCRETE SLAB STRUCTURES**

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

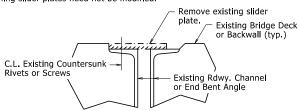
DRAWN BY:__ KWY DATE: 11/7/2019 FILENAME: b55063.dgn CHECKED BY: SWP DATE: 11/7/2019 SCALE: None DESIGNED BY: STD.

DRAWING NO. 55063

BRIDGE ENGINEER

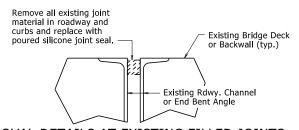
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS

At the direction of the Engineer, the portion of existing slider plate shown shall be removed and replaced with a new plate as shown in "SLIDER PLATE JOINT MODIFICATION". The portion of existing slider plate shall be removed and disposed of in accordance with Section 821. The cut face shall be ground square and flush with the face of the existing angle or channel. Removal and disposal of existing slider plate material will not be pald for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant". Properly functioning slider plates need not be modified.



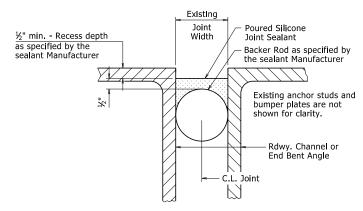
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS WITH GRADE RAISE

The existing slider plate shown shall be removed and replaced with new plates as shown in "JOINT MODIFICATION WITH GRADE RAISE". The existing slider plate shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing slider plate material will not be paid for directly, but shall be considered subsidiary to the item "silicone Joint Sealant".



REMOVAL DETAILS AT EXISTING FILLED JOINTS

The existing joint material shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing joint material will not be pald for directly, but shall be considered subsidiary to the Item "Sillcone Joint Sealant".



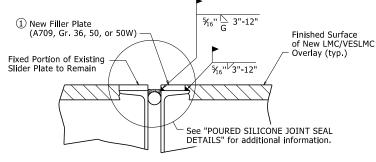
POURED SILICONE JOINT SEAL DETAILS

Existing Joint Seal shall be completely removed, backer rods placed, and Silicone Joint Sealant installed across the entire width of the bridge deck in accordance with these details, Section 809, and the Manufacturer's recommendations. Removal of existing Joint Seal will not be pald for directly, but shall be considered incidental to the item "Silicone Joint Sealant".

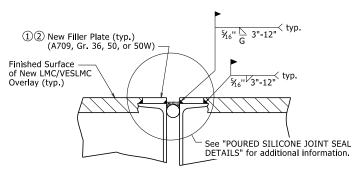
Backer rods shall be extended beyond the length of the poured joint in the initial joint repair area so that the two pieces can be properly spliced together prior to installing sealant for the adjacent joint repair. Manufacturer's recommendations shall be followed to prevent sealant leakage during repair work.

Backer rods shall be appropriately sized and set to the depth shown in the Manufacturer's literature based on the joint width at the time of sealing. Except as noted, do not install more backer rod than can be sealed in the same day. The Contractor shall verify separation of the backer rod from the joint material after joint material has set.

Backer rod shall be notched or otherwise fit around any existing seal supports or bumper plates to maintain its proper depth as defined above.



SLIDER PLATE JOINT MODIFICATION

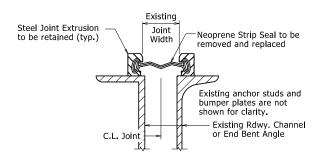


JOINT MODIFICATION WITH GRADE RAISE

① New field attached plates atop existing roadway channels or angles are required. The plate thickness shall be adjusted as necessary to match surface of finished surface of LMC/VESLMC Overlay and the width shall be ¾" less than the existing channel flange or angle width to allow for fillet weld as shown.

All new Structural Steel shall be ASTM A709 (Gr. 36, 50, or 50W). The surfaces not in contact with concrete shall be cleaned and painted in accordance with Section 638. Only one coat of paint is required and shall be applied in the fabricator's shop. Grade 50W steel shall not be painted, but shall be cleaned in accordance with Subsection 807.84(e). Structural Steel and Painting will not be paid for directly, but shall be subsidiary to the item "Silicone Joint Sealant".

② Details shown are for an expansion joint where two bridge units meet. Eliminate filler plate on backwall and proceed with backwall repair in accordance with "BACKWALL REPAIR REMOVAL DETAIL" and "BACKWALL REPAIR INSTAL



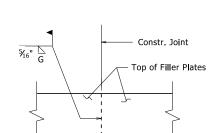
STRIP SEAL JOINT DETAILS

Existing neoprene strip seal joint material shall be completely removed and new neoprene strip seal joint material shall be installed across the entire width of the steel extrusions in accordance with these details, Section 809, and the Manufacturer's recommendations. Prior to installing the new joint material, the Contractor shall clean the steel extrusion at the Engineer's direction and in accordance with the new strip seal joint material Manufacturer's recommendations.

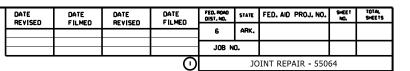
Removal and replacement of the existing neoprene strip seal joint material will require the removal of the parapet slider plates, where present. Parapet slider plates removed for this work shall be reinstalled after installation of the new neoprene strip seal joint material.

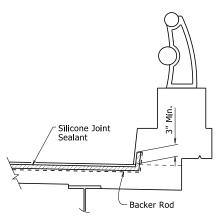
The new neoprene strip seal joint material shall provide a movement rating of four inches. The repaired expansion joint shall be capable of sealing the deck surface and parapet area to prevent moisture and other contaminants from descending through the joint.

All work and material associated with removing the existing joint material, cleaning the extrusions, removal and reinstallation of parapet slider plates, and installation of new joint material shall be paid for under the item "Modification of Existing Bridge Structure (Bridge No. _)".



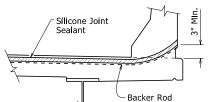
PLAN VIEW OF FILLER PLATE



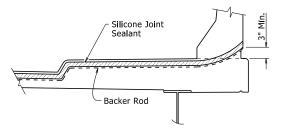


SILICONE JOINT SEAL PLACEMENT AT CURB

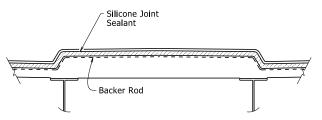
Vertical joints may require forming. The clearance from deck surface to joint material shall be maintained.



SILICONE JOINT SEAL PLACEMENT AT RAIL



SILICONE JOINT SEAL PLACEMENT AT SIDEWALK



SILICONE JOINT SEAL PLACEMENT AT MEDIAN

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ENGINEER

No. 9235

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STANDARD DETAILS FOR JOINT REPAIRS & MODIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

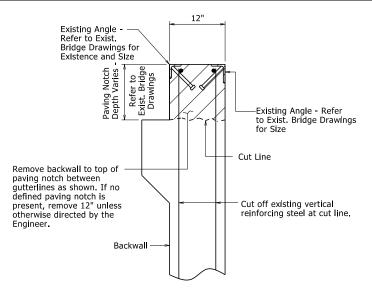
 DRAWN BY:
 KWY
 DATE:
 11/7/2019
 FILENAME:
 b55064.dgm

 CHECKED BY:
 SWP
 DATE:
 11/7/2019
 SCALE:
 None

 DESIGNED BY:
 STD.
 DATE:
 ----- SCALE:
 None

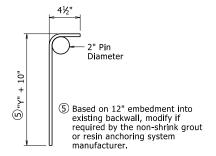
DRAWING NO. 55064

PRINT DATE: 11/4/2020

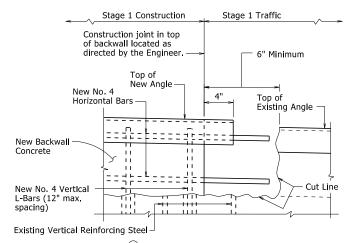


BACKWALL REPAIR REMOVAL DETAIL

The portion of the backwall above the paying bracket as shown shall be removed and disposed of in accordance with Section 821. Payment for all materials, labor, tools, and equipment regulred for this work will be inclusive to the item "Modification of Existing Bridge Structure (Bridge No. _)".

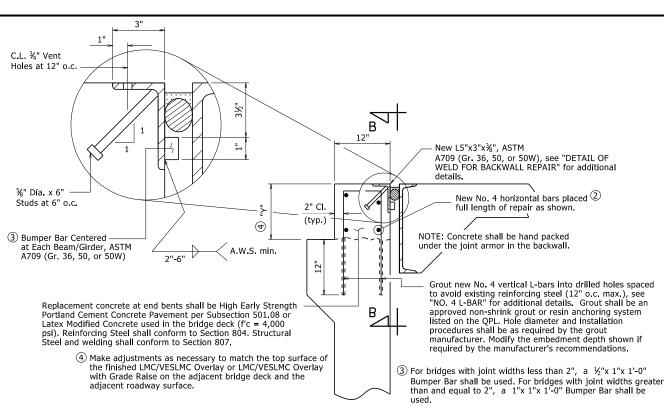


NO. 4 L-BAR



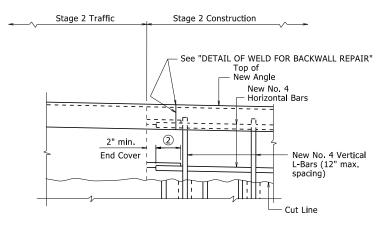
^①VIEW B-B, STAGE 1

Details shown for LMC/VESLMC Overlay with grade raise; details similar for LMC /VESLMC Overlay without grade raise.



BACKWALL REPAIR INSTALLATION DETAIL

The portion of the backwall above the paving bracket shall be reconstructed as shown. Payment for all materials, labor, tools, and equipment required for this work will be inclusive to the item "Modification of Existing Bridge Structure (Bridge No. _)". Details shown for LMC/VESLMC Overlay without grade raise; details similar for LMC/VESLMC Overlay with grade raise.



^①VIEW B-B, STAGE 2

- ① Details shown are typical for staged construction. When full width rehabilitation of a bridge deck is possible, eliminate construction joint shown and perform the backwall repair in one operation for full repair width.
- 2 The 32 bar diameter minimum lap per Subsection 804.07 may be waived if this requirement cannot be met due to construction conditions. In this situation, the lap length shall be maximized as much as practical.

T	DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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l					JOB N	0.			

BACKWALL REPAIR - 55065

_____Stage 1 Constr. Stage 2 Constr. Constr. Joint in Top of Backwall 4" (measured along angle) Top of Roadway Angle L5"x3"x¾" (typ.)

NOTE: All welding shall be done after the Stage 1 concrete pour and prior to the Stage 2 concrete pour

1 DETAIL OF WELD FOR BACKWALL REPAIR

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STANDARD DETAILS FOR **BACKWALL REPAIRS**

ARKANSAS STATE HIGHWAY COMMISSION

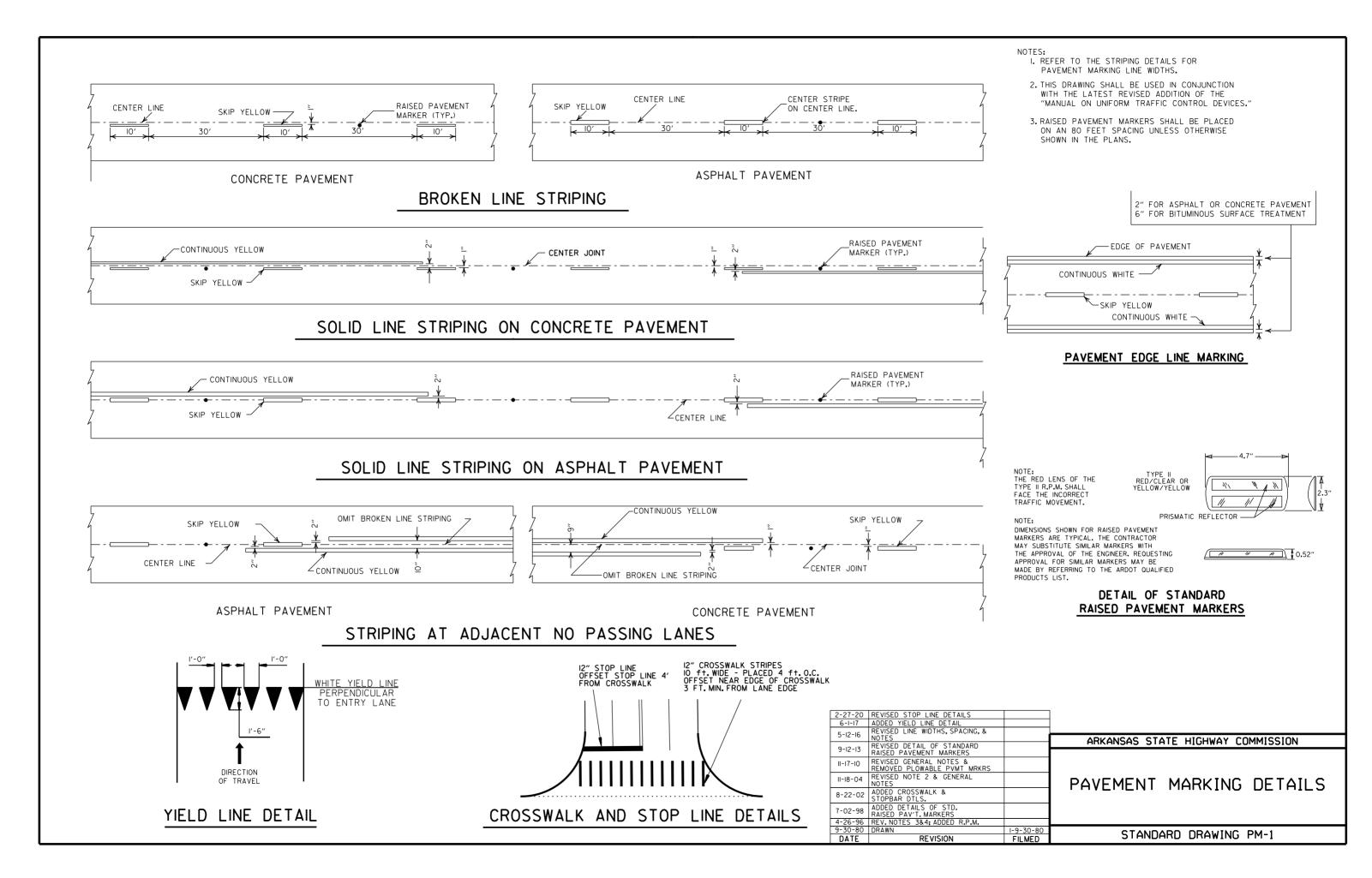
LITTLE ROCK, ARK.

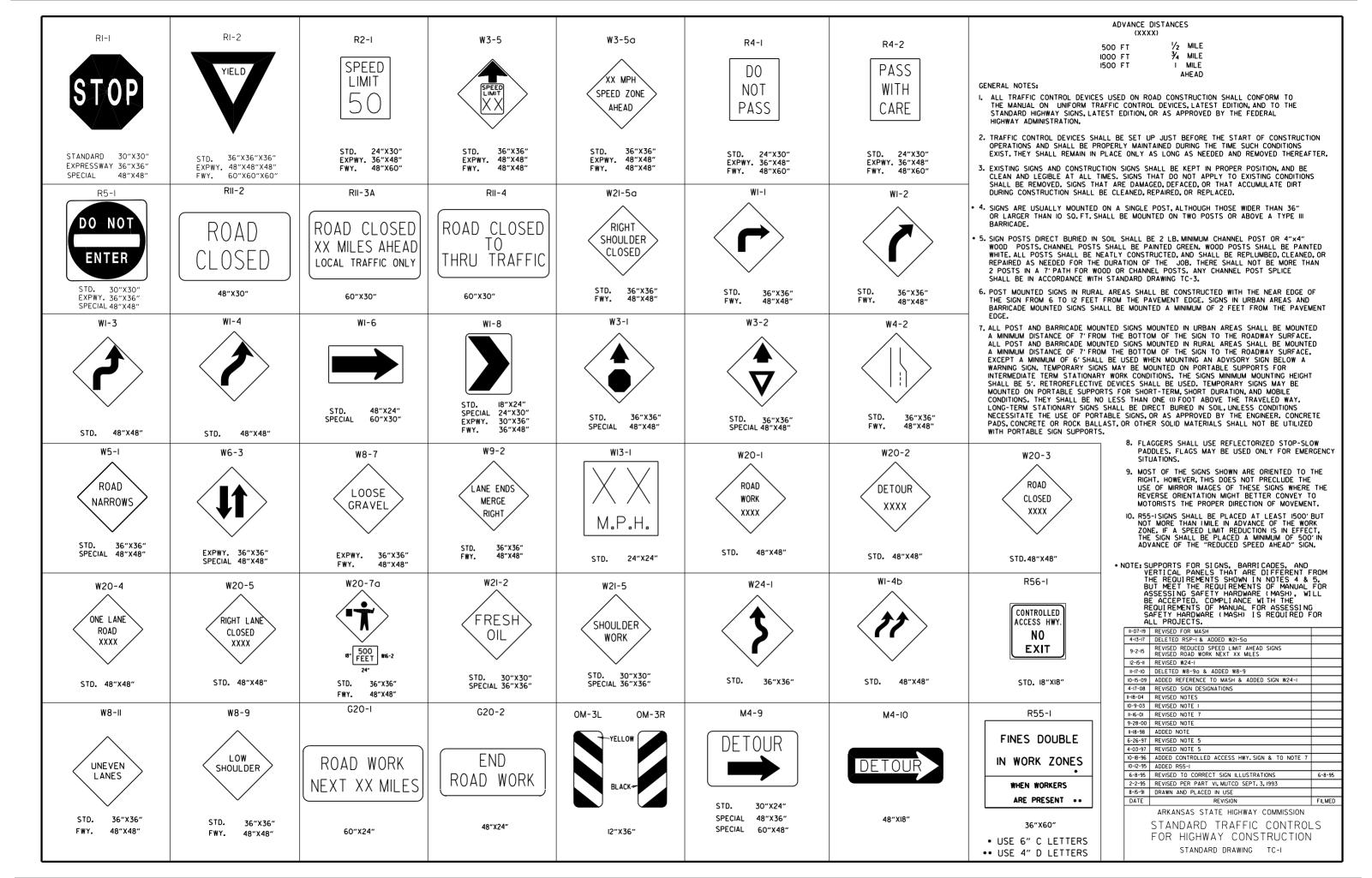
DRAWN BY: KWY DATE: 11/7/2019 FILENAME: b55065.dgn CHECKED BY: SWP DATE: 11/7/2019 SCALE: None DESIGNED BY: STD.

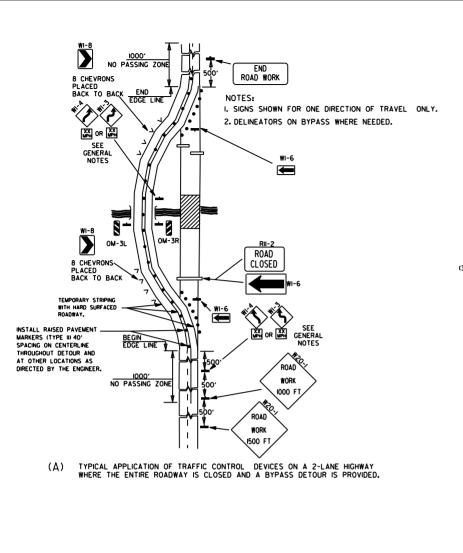
DRAWING NO. 55065

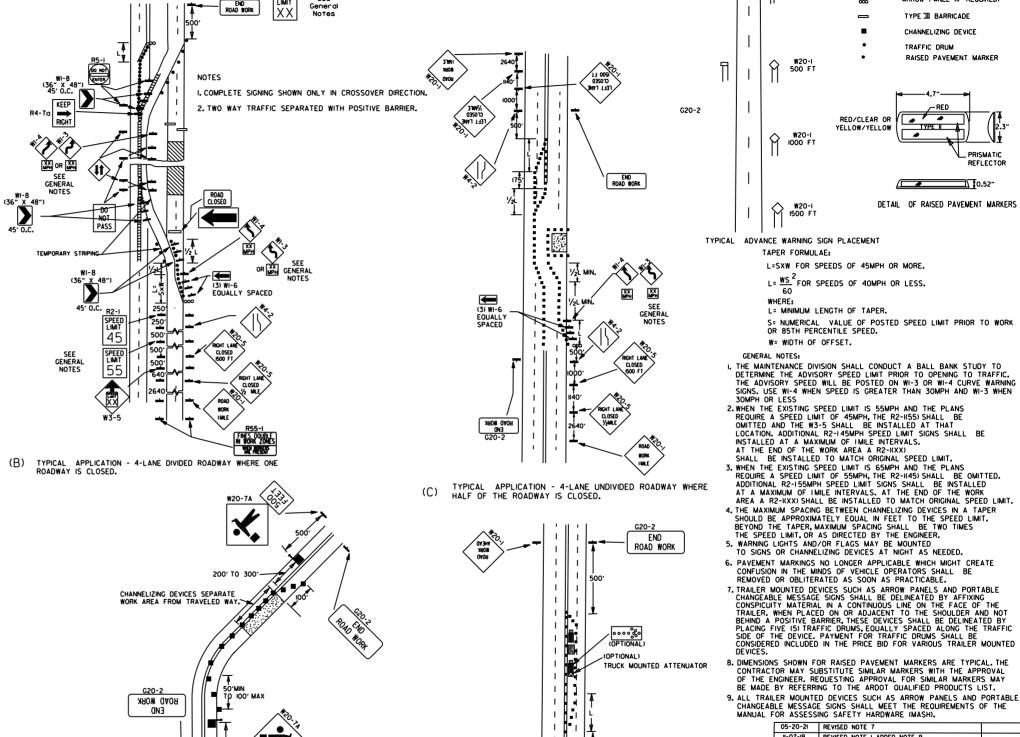
ARĶAŅSAS LICENSED **PROFESSIONAL ENGINEER** No. 9235

BRIDGE ENGINEER









WEST DETOUR NOTES: I. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR. 2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC. **∖1500 FT** TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.

2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED. 3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.

I. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.

4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.

WORK

(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

G20-2

ROAD WORK

END

8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER, REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST. 9. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).								
	05-20-21	REVISED NOTE 7						
	11-07-19	REVISED NOTE I, ADDED NOTE 9						
	9-2-15 REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5							
	9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS						
	3-11-10	ADDED (AFAD)						
	II-20-08	REVISED SIGN DESIGNATIONS						
	11-18-04	ADDED GENERAL NOTE						
	10-18-96	ADDED R55-I						
	4-26-96	CORRECTED (a) BEHIND G20-2						
	6-8-95	CORRECTED SIGN IDENT. ON WI-4A	6-8-95					
	2-2-95	REVISED PER PART VI, MUTCO, SEPT. 3, 1993						
	8-15-91	DRAWN AND PLACED IN USE						
	DATE	REVISION	FILMED					
		ARKANSAS STATE HIGHWAY COMMISSION	·					

KEY:

YELLOW/YELLOW

L=SXW FOR SPEEDS OF 45MPH OR MORE.

 $L = \frac{WS}{60}^2$ FOR SPEEDS OF 40MPH OR LESS.

S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

L= MINIMUM LENGTH OF TAPER.

W= WIDTH OF OFFSET.

G20-I

TAPER FORMULAE:

WHERE:

GENERAL NOTES:

FLAGGER POSITIVE BARRIER

ARROW PANEL (IF REQUIRED)

RAISED PAVEMENT MARKER

TYPE I BARRICADE

CHANNELIZING DEVICE

TYPE II A

DETAIL OF RAISED PAVEMENT MARKERS

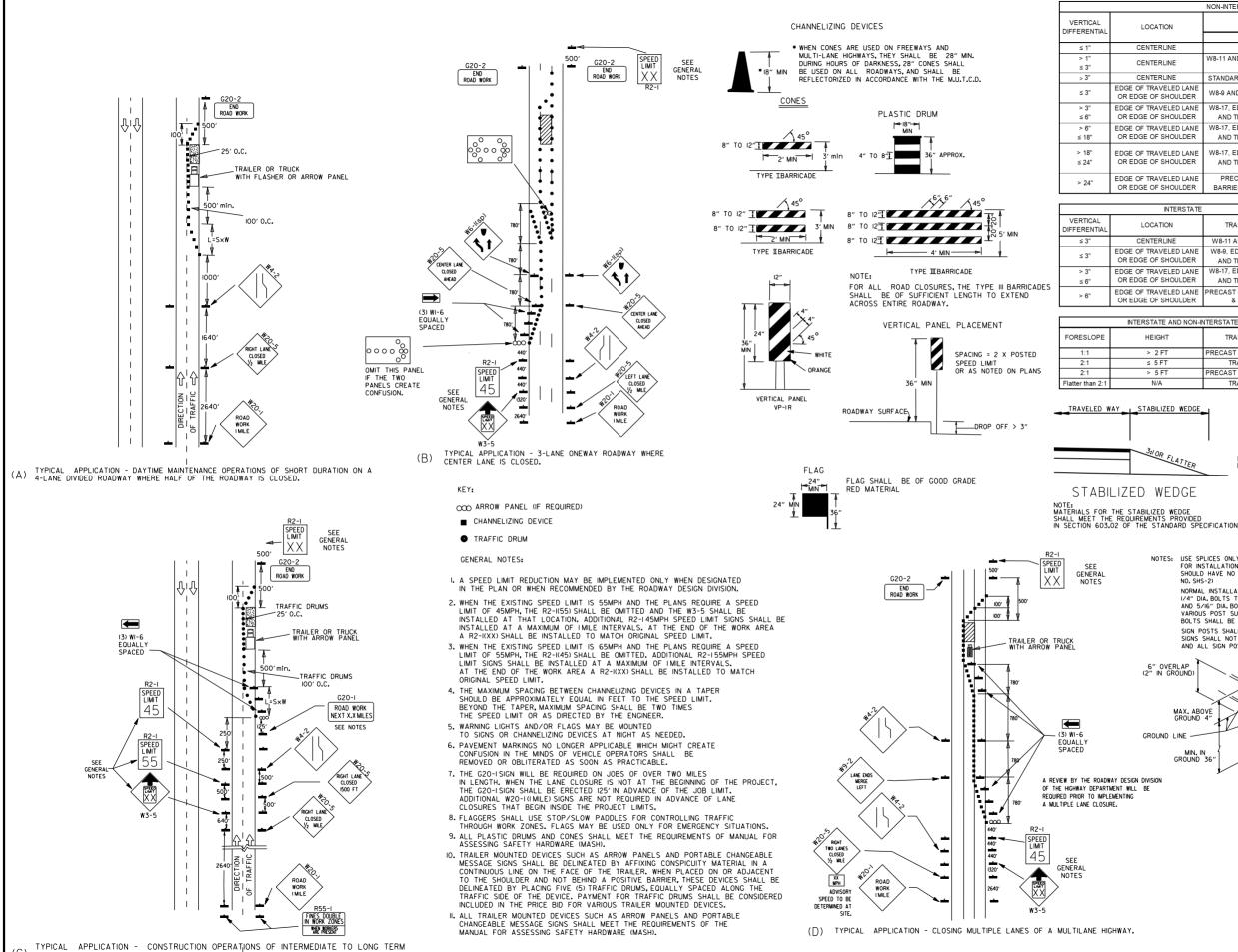
PRISMATIC

0.52"

TRAFFIC DRUM

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-2



DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

TRAFFIC CONTROL DEVICES NON-INTERSTATE TRAFFIC CONTROL ≤ 45 MPH > 45 MPH W/8-11 W8-11 V8-11 AND CENTERLINE LAN W8-11 AND CENTERLINE LANE STRIPING STRIPING STANDARD LANE CLOSURE STANDARD LANE CLOSURE W8-9 AND TRAFFIC DRUMS W8-9 AND TRAFFIC DRUMS W8-17, EDGE LINE STRIPING. W8-17, EDGE LINE STRIPING AND TRAFFIC DRUMS⁽¹⁾ AND TRAFFIC DRUMS(1) W8-17. EDGE LINE STRIPING W8-17. EDGE LINE STRIPING AND TRAFFIC DRUMS(1) AND TRAFFIC DRUMS(2) STABILIZED WEDGE, W8-17 W8-17, EDGE LINE STRIPING EDGE LINE STRIPING, AND AND TRAFFIC DRUMS(1) TRAFFIC DRUMS(3) PRECAST CONCRETE PRECAST CONCRETE BARRIER⁽⁴⁾ & EDGE LINES BARRIER⁽⁴⁾ & EDGE LINES GENERAL NOTES:

I. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN TRAFFIC CONTROL

W8-11 AND LANE STRIPING W8-9. EDGE LINE STRIPING. AND TRAFFIC DRUMS(2) W8-17, EDGE LINE STRIPING AND TRAFFIC DRUMS(2) RECAST CONCRETE BARRIE & EDGE LINES

INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER. A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER. W21-5, W21-5, W21-50, AND/OR W21-5D SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER. TIME LIMITATIONS MUST CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).

6-8-95

ARKANSAS STATE HIGHWAY COMMISSION

FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING

STANDARD TRAFFIC CONTROLS

TOP SLOW PADDLE

FRONT BACK 6" SERIES "C" IB" STOP (SLOW) COLORS LEGEND-WHITE (REFL) BACKGROUND-RED (REFL) LEGEND-BLACK BACKGROUND-ORANGE (REFL) AREA OUTSIDE DIAMOND-BLACK POST SHALL NOT EXTEND ABOVE SIGN NOTE: MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS. & SPLICE BOLTS NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION, TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2) NORMAL INSTALLATIONS WILL REQUIRE

TRAFFIC CONTROL

RECAST CONCRETE BARRIE

TRAFFIC DRIIMS

PRECAST CONCRETE BARRIE

TRAFFIC DRUMS

I/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE 30" MIN. GROUND VARIOUS POST SUPPORTS, EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS. SPLICE SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB. MAX. ABOVE GROUND 4" GROUND LINE-DETAIL OF SPLICES 08-12-21 REVISED TRAFFIC CONTROL DEVICES AND NOTES MIN. IN GROUND 36 05-20-21 REVISED NOTE IO 2-27-20 REVISED TRAFFIC CONTROL DEVICES DETAILS II-07-I9 REVISED NOTE 9, ADDED NOTE II 7-25-19 REVISED TRAFFIC CONTROL DEVICES DETAILS 9-2-I5 REVISED NOTE 2 & REPLACED R2-5A WITH W3-5 IO-I5-09 ADDED REFERENCE TO MASH 4-03-97 ADDED (SP) TO W6-1& REVISED TRAFFIC CONTROL DEVICES NOTE IO-I8-96 ADDED R55-I 10-12-95 MOVED UPPER SPLICE 6-8-95 REVISED SPLICE DETAIL, TEXT 2-2-95 REVISED PER PART VI, MUTCD, SEPT. 3, 1993 8-I5-9I DRAWN AND PLACED IN USE DATE

